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The
Benjamin Smith Lyman
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Brandreth, Capt. A. M. — R. E. Asst Sec'y & Payt. Govt Pub. Works Dept. Lahore, page 8, 19. 50. 57. 56. 57.

Borradaile, Schiller & Co., Messrs. — No. 104 Clive St., Calcutta, page 5.

Controller of Public Works Accounts, Bengal, Lotts —, Writers Building, North side of Tank Square, Calcutta, page 10.89.

C
D

Espinevil, Lionel J. d' —, No. 411 Walnut St, Philadelphia, Pa, U.S.A.
States of America. page 62.

E

F

G
H

J
K

Lyman, Miss Mary —, Care of Judge Lyman, Northampton, Massachusetts, United States of America, page 2.

Lambert Capt. F. —, R. E., Exec. Engr. Rawal Pindee, Punjab, page 7. 43.

Lyman, Mrs. S. F. —, Northampton, Massachusetts, United States of America, page

Lyman, Judge S. F. — Northampton, Massachusetts, United States of America, page

" James F. — Care of Mutual Benefit Life Insurance Co., Newark, New Jersey, U. States of America. page 52.

Miller, J. Imbrie — Esq., Deputy Engineer P.W.D., No. 4 Harrington St. Calcutta, page 1.

L
M

MacGregor, Judge D. A. — Sydney, Cape Breton, Canada. page 60.

Newton, Dr. J. —, Supt. Genl. of Vaccination, Umbala, Punjab, 25.5.58.

Mc.
N

Pemberton, Capt. R. B. —, R.E., Asst. Sec.y to Govt. of India, P.W.D., Somerset Buildings, Strand, Calcutta. page 9.

Patents, To the Commissioner of —, Washington, D.C., U.S.A. Petition and Specification. page 20.

O

P

Secretary to the Govt. of India in the P. W. D., To the Hon'ble ——, Imperial Buildings, Strand, Calcutta. page 14.

R
S

T
U

Wynne, A. B.— Esq., Geol. Survey of India, Kawul Pindee, Punjab, page 6, 18.

Y
Z

Calcutta, 17 Nov. 1870.

Dr. J. Newton,
Superintendent Genl. of Vaccination,
Umballa.

My dear Sir

The day of my arrival here some days ago I saw Dr. Stoliczka the Secretary of the Asiatic Society and spoke to him of your wish to become a member of the Society. He says there would be no difficulty at all about [illegible] your name and address, so as to propose you at the next meeting, the first Wednesday in December. The proposal will then be [illegible] with as usual and you will be elected [illegible] January.

I have been much longer in coming [illegible] [illegible] your letters [illegible] [illegible] [illegible]

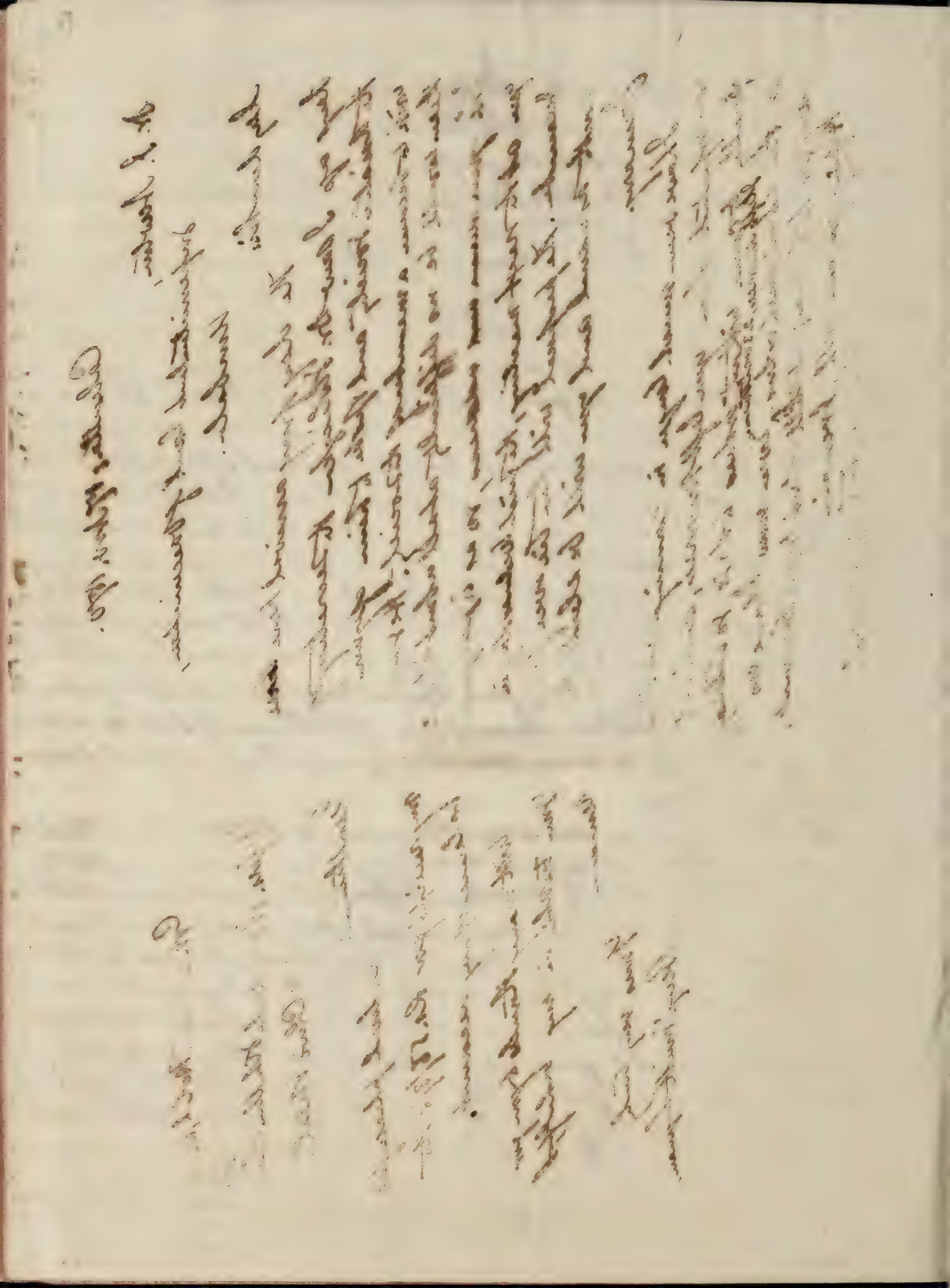
[illegible]

Gentlemen

[illegible] kindly please [illegible] my remittance Rs. 56/ [illegible] to my account.

[illegible] and thanks to you for your trouble in my behalf [illegible]

Yours very truly,
[illegible]



[illegible], [illegible] 187[illegible].

My dear [illegible]:

It was [illegible] yesterday from [illegible] in the [illegible] that he [illegible] a letter [illegible] from which it appeared that [illegible] [illegible] therefore [illegible] to [illegible] you [illegible] information [illegible] [illegible] [illegible] [illegible] [illegible] from your [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] Calcutta [illegible] for the first time [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] that the [illegible] would be printed [illegible] [illegible] of Col. [illegible] office [illegible] [illegible] that you and your family are all well and [illegible] [illegible] [illegible] [illegible]

Capt. P Lambert.

[illegible]

[illegible]

Capt. [illegible] U. S.

[illegible]

Dear Sir:

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Calcutta; 21 Nov. 1870.

The Controller of Public Works Accounts
for Bengal.

Sir,

The Controller of Public Works Accounts for Punjab [illegible] send for my information a copy of [illegible] from [illegible] asking you to pay what may be due to me for [illegible] travelling days of Bengal [illegible]. The Executive Engineer of Rawal Pindi division, Punjab, [illegible] writes me that the same [illegible] [illegible] passed by the Controller [illegible] [illegible] [illegible] [illegible] for [illegible], it seems unnecessary for you to comply with the request addressed to you by the Punjab Controller, as the whole amount has already been paid.

Yours truly,

Benj. Smith Lyman.

[illegible]

Dear Mother:

[Copy]

Calcutta, 22 Nov. 1870.

To the Honble Secretary to the Government of India
in the Public Works Department.

Sir: Connected with my work for your department there are a few matters which in the absence of a leisured personal interview I take the liberty of mentioning in writing.

2. It would clearly be quite impracticable for me within the limits of my engagement to inspect in person the testing by boring even a large number of the many separate points where oil is found in the Punjab at least, such points are almost invariably quite separate from each other and a boring test of one proves little or nothing in regard to the others. It is plainly desirable to learn first without boring what can be known of each place in regard to the extent, position and richness of the oil bearing bed of rock and the best point of attack for boring. After this knowledge has been put on record in proper maps and reports borings can be made at any future time. Such a preliminary survey of all the places in a province is necessary also for knowing which place deserves best to be first tested by boring.

3. It is desirable, therefore, to make more or less exact geological and topographical maps of the lands where any oil is found to make a boring test seem possibly worth making at some future time. Such maps are in fact the basis of the reports, and not only illustrate them but are working maps, guides to the first boring. For making the maps one needed both surveying and in the field and mapping in the office. In mapping a rough draft must first be made and then a finished copy. The rough draft is best made near the place to be mapped, in camp if necessary; but the final copy can be made almost anywhere, but best in a house than in camp, as the requirements are merely good drawing facilities a good light, for the final copy to be neatly or too well; for it is meant for reference for years to come, whenever by changes of local officials attention may be drawn from time to time to the question of working the oil going.

4. If it be in your opinion at all worth while to economise my time on account of the shortness of my engagement to it should be borne

in mind that much of the work just described could be done quite well by men of much lower [illegible] than mine. Especially in making the final copy of the map, which takes more time than all the rest of the work together, a mere draftsman (if a good one) could do much of the mere mechanical part, such as the lettering at least, a very large share of the whole work, since for a clear understanding a map should not be strictly lettered. Copying reports could likewise be done by a mere copyist. It is possible also that some of the surveying and much mapping might be satisfactorily done by a mere overseer of the Public Works Department after some special training; but it is also quite possible that for the short term of any engagement it would take more time to train such an assistant than his work would save.

5. A certain amount of time is also lost in getting orders, in getting tents from local authorities and in the case of the Punjab in waiting for the arrival of the boring party and in getting drawing paper for the final maps. Would it not perhaps be best to obviate such delays in future by giving once for all general orders to survey the oil lands of both Assam and Burma, orders which could of course be changed or countermanded afterwards, if need be; also by taking tents from Calcutta, telegraphing for them in advance?

6. The amount of time lost by these delays for the Punjab survey was about two weeks and a half for the final orders, about two weeks for tents, some ten days in waiting for the boring party to arrive at Kohat, and a week or more for drawing paper (more would have been lost if I had waited special orders to return from the job); making more than a month and a half in all. The help of a good draftsman merely for the final maps (no such man could be had at Murree) and a copyist would have saved perhaps two months and a half more. In all, then, at least four months could have been saved. Unluckily no time for these delays were not compensated by the refreshment that an equal amount of holidays would have given. On the contrary an effort was made especially at Murree to make up for time lost

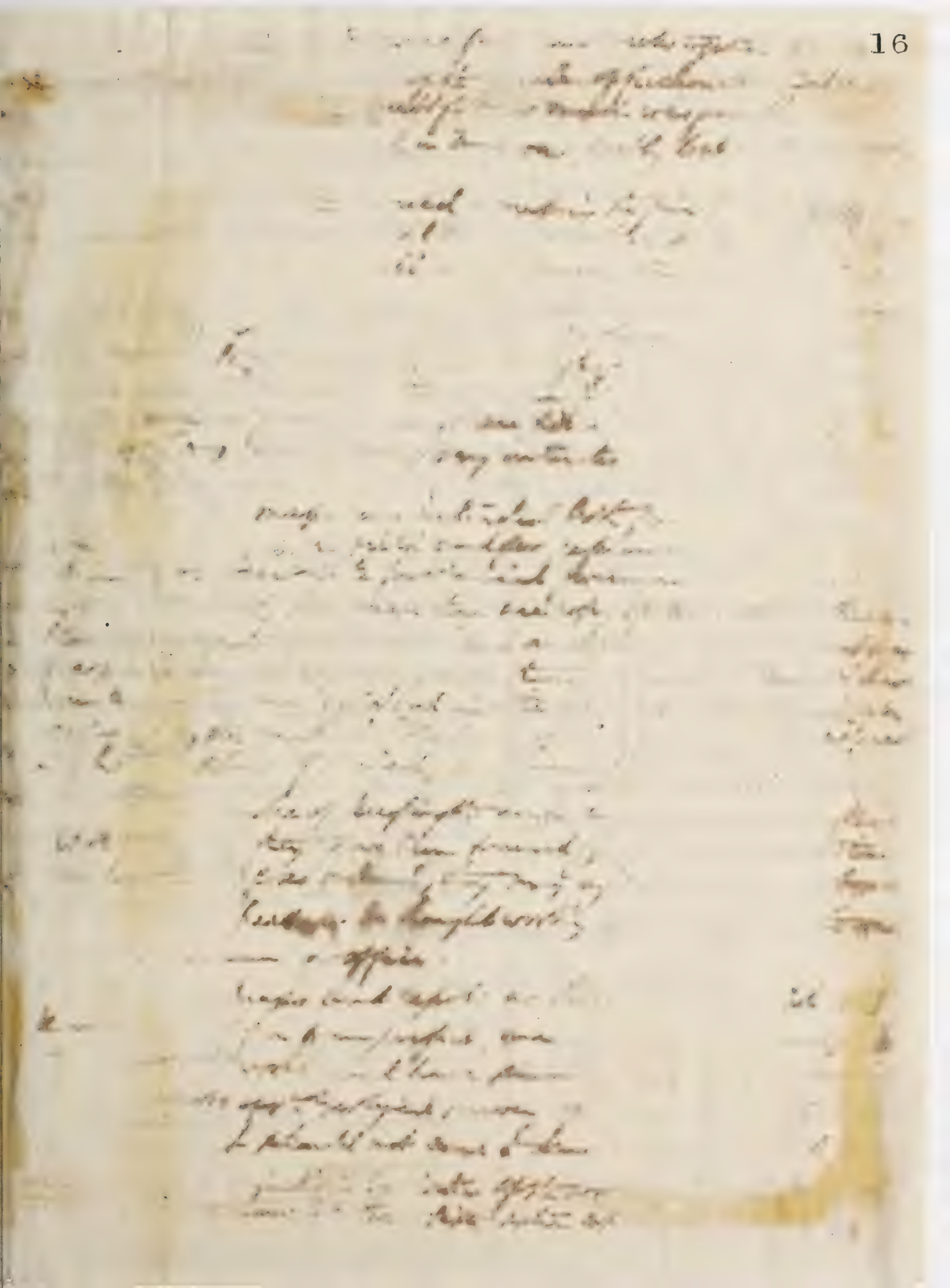
measure by working extra hours for many weeks together & the extra of more than fifty percent. of the regular office hours in Calcutta and elsewhere. But it is doubtful how much was gained in this way; for what was gained in time was partly lost in vigor, and consequently in field.

7. Not only is there no need of making the final copy of the maps nor of the reports near the oil fields, but there are sometimes the reasons why it is desirable not to finish them without first at Calcutta; for there are often points in them on which it is important to consult libraries and collections such as are found in no only here. Might it not be well therefore to allow me to use my own discretion about returning here before the maps and reports are for a given province are done unless specially ordered to the contrary on reporting my intention to the proper local authority?

8. As the maps are intended both for use in actual boring operations in the field and for reference in future years not only at the seat of the provincial government but here in Calcutta, it is likely that more than one copy of them will be desired. The most exact and convenient and perhaps the cheapest way of copying is by photography; and these maps of the Punjab have been drawn in one color and in other respects with special reference to copying by this method. The scale of the maps could be reduced in photographing if desired, say from 1/6000 to 1/10,000.

9. For the sake of keeping the maps unmounted until after photographing they have been framed for reference in the government. If so ordered, they may afterwards be mounted but they may perhaps be thought worthy of a place on the walls of some museum or office.

10. Such maps and reports as those of the Punjab Oil Lands, even if far from perfect, are of interest to geologists throughout the world, and have similar reasons for publication that the reports of the Geological Survey of India have. If, however, the government should not care to send copies of them to the principal [illegible] Societies of the world, I should be much pleased to be allowed to take fifty extra copies of the reports [illegible]



mere cost of press work and paper, as they are printed a
the correspondence of the Punjab Government. But if they
be printed in the ordinary course a more convenient
for libraries, the extra copies would be preserved in that
In case of such a publication the maps could be easily pri
by photozincography.

11. It is of course an advantage and a saving of
in making the surveys to have already a good map of the re
on as large a scale as may be. It must therefore be worth
while to furnish me beforehand not only with the largest p
map of the region, but if need be with a manuscript copy of
large unprinted map of it that may be on file with the Gov
ment.

12. Some of these points by which time might be saved
survey have been suggested before; but have not been very
much urged, because it was clearly impossible for you
to judge before seeing my work to judge whether it would be
worth while to add to the current expense of the survey for
sake of saving my time. Provincial authorities are, of
still less in a condition to judge of such matters; and it
perhaps seem best to you therefore to give me quite defin
instructions in regard to me, so as to save the time that may
otherwise be lost in deciding on certain points or in
corresponding for better information.

I have the honor to be

Sir,

Your most obedient Servant

Benj. Smith Lyman.

[illegible] 23 [illegible] 179[illegible].

My dear [illegible]:

Your favor of the fifteenth came [illegible] [illegible] I was sorry [illegible]

[illegible] what [illegible] you [illegible]

[illegible] To tell [illegible]

[illegible] for [illegible]

[illegible]

[illegible] was [illegible]

[illegible] to be [illegible]

[illegible]

[illegible] your [illegible] instead [illegible]

[illegible]

[illegible] and to come here at any [illegible]

[illegible]

[illegible]

[illegible] until my [illegible] had been [illegible] and

[illegible]

[illegible]

[illegible] for he is [illegible]

[illegible]

[illegible] your [illegible]

[illegible]

[illegible] for you. [illegible] my [illegible]

[illegible]

I [illegible] here [illegible] night [illegible]

[illegible]

[illegible] send me [illegible]

[illegible]

[illegible] well [illegible]

[illegible]

To the Commissioner of Patents

Sir: Your petitioner prays that letters patent may be granted to him for the invention set forth in the annexed specification: and he hereby appoints J. Peter Lesley of the city of Philadelphia, Penn., his attorney, with full power of substitution and revocation, to prosecute the application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith.

Specification.

I, Benjamin Smith Lyman, of No. 10 [illegible] street in the City and County of Philadelphia, in the State of Pennsylvania, but for the time being staying [illegible], have invented certain improvements [illegible]

[illegible] on horizontal [illegible] is [illegible] [illegible]
[illegible] the [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] (C) [illegible] on the [illegible]
[illegible] (D). [illegible] [illegible]
[illegible] the [illegible]
the [illegible] the motion [illegible] [illegible]
[illegible] by [illegible] shoulder (E) [illegible]
[illegible] [illegible] similar shoulder [illegible] [illegible]
the [illegible] [illegible] there may be a [illegible]
[illegible] and [illegible] may [illegible] [illegible] close [illegible]
(fig. 5); and, indeed, there need then be [illegible]
(fig. [illegible] But the best way is to have two [illegible] [illegible]
[illegible] as possible, which will be [illegible] [illegible] or
[illegible] transit of ordinary [illegible]; [illegible]
[illegible] pass about one inch [illegible] from
[illegible] (F) of the plate of the instrument [illegible]
centre.
[illegible] (G) is fixed [illegible] [illegible]
[illegible] of the [illegible] [illegible] of the [illegible]
[illegible] [illegible] way, with the [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] from [illegible]
[illegible] [illegible] [illegible] by [illegible]
[illegible] [illegible] [illegible] [illegible]
[illegible] be turned [illegible]

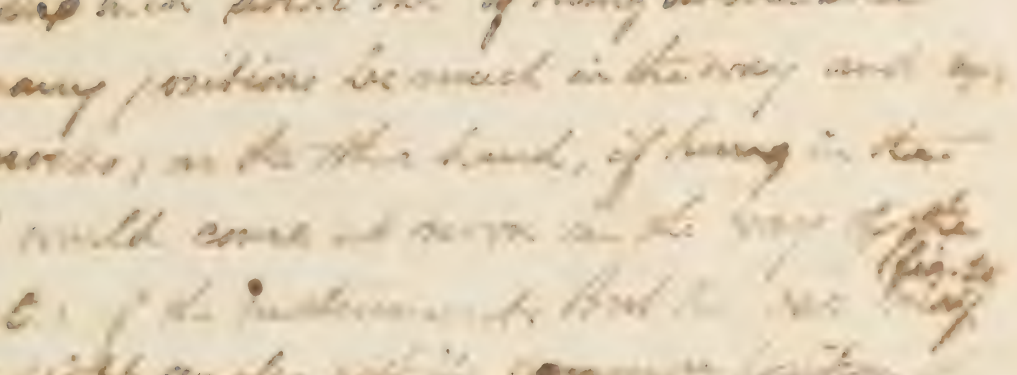
[illegible] so arranged as to [illegible] [illegible] [illegible] [illegible].

[illegible] Line at Right Angles with Polar [illegible] [illegible]. [illegible] or outer end of the part of the polar axis that [illegible] [illegible] the centre line may be fixed a bar (fig. 9) at right angles with the axis and therefore turning in an [illegible] [illegible] plane; and this bar may have at one end an arc (A) of forty [illegible] degrees for declination [illegible] [illegible]. The arc should be in the same plane with the polar axis or in one parallel thereto; and should have a radius of two inches and a half at least so as to [illegible] [illegible] with a vernier. (B) The arc may be kept in place by a bar (B) running from near the outer end of the arc through the centre of curvation [illegible] [illegible] [illegible] and of the main bar, which would then be five inches [illegible] [illegible] [illegible] there should then be a cross piece [illegible] [illegible] [illegible] [illegible] at that centre or axis. [illegible] both bars [illegible] [illegible] [illegible] [illegible] cross piece in [illegible] [illegible] [illegible] [illegible] (fig. 9), having something in bulk without [illegible] [illegible] [illegible] [illegible] may meet at the centre [illegible] [illegible] the arc without changing the position [illegible] [illegible] [illegible] to the polar axis (fig. 9); a little [illegible] [illegible] without loss of strength. [illegible] [illegible] [illegible] line through the middle [illegible] [illegible] should [illegible] at angle [illegible] the polar axis [illegible] [illegible] centre of

a curvature of the arc is a bearing the [illegible] [illegible] [illegible] in which it moves in the plane of the arc [illegible] [illegible] one end of it pushing to the second bearing a [illegible].

The declination arc may be joined to the polar axis either at one end of the axis [illegible] [illegible] [illegible] the arms (fig. 13) or at the declination axis (fig. 14). In the last case the vernier may be put on the [illegible] [illegible] [illegible] between the two ends, and the [illegible] [illegible] [illegible] about a point near one of its ends; [illegible] [illegible] [illegible] bar joined by its middle to the declination at the end of the polar axis [illegible] [illegible] in height [illegible] [illegible] [illegible] [illegible] [illegible] the [illegible] [illegible] is the daily turn round the polar axis.

Vernier Parallel to Polar Axis. — The declination axis may be fixed to one end of the turning pair [illegible] [illegible] axis, [illegible] the [illegible] on the inner [illegible], in such a way that the [illegible] [illegible] [illegible] [illegible] [illegible] the polar axis is parallel to it (fig. 15). The arm T from the declination axis [illegible] with the [illegible] vernier to mark the declination, and the [illegible] will be fixed to the vernier arm at any convenient point between the two ends [illegible] [illegible] [illegible] [illegible] with that arm. When the vernier is [illegible] the [illegible] [illegible] [illegible] parallel to the equator.



[continued on page 34]

Calcutta, [illegible]

[illegible]:

Your welcome favors of the eleventh and [illegible]
[illegible] only [illegible] third day before [illegible]
[illegible] by the [illegible] of San Francisco and China.
[illegible] the [illegible] for the mail of the [illegible]
[illegible] after [illegible] first arrived in Calcutta [illegible]
[illegible] Calcutta and [illegible]
[illegible] arrived here on the [illegible]
[illegible] in regard to my letters. The [illegible]
[illegible] between [illegible] of yours [illegible]
[illegible] and China [illegible]
[illegible] the eleventh, and it would therefore be best to [illegible]
[illegible] letters "by England" or "by [illegible]," so that the
[illegible] will [illegible] no mistakes. — I am very glad that the
[illegible] turned out so well, but by [illegible]
[illegible] of the proceeds in the [illegible]
[illegible] over the [illegible]
[illegible] then to furnish me with the [illegible]
[illegible] funds that [illegible]
[illegible] only [illegible]
[illegible]. I quite understand the [illegible]
[illegible] in advance, but you can if you [illegible]
[illegible] done, on the [illegible]
[illegible], indeed, [illegible]
[illegible] for her [illegible]
[illegible] will [illegible]
[illegible] should [illegible]
[illegible]; nor all [illegible] in [illegible] the
[illegible] interrupted [illegible]. I am delighted to see
by your letters as well as by what Mother wrote [illegible]
[illegible] have improved [illegible] a year ago; and [illegible]
[illegible] continue to improve [illegible]
[illegible] reminds me [illegible]
[illegible] day; but [illegible]
[illegible] am accustomed to [illegible]
[illegible] the anniversary [illegible]
[illegible], [illegible] days ago. — [illegible] has been [illegible]

[illegible]

[illegible]

Another invention of less importance is to be finished this evening, that is the Camp bed of which I believe I spoke once before. It was made of [illegible] by a native carpenter under [illegible] direction & they managed to spread to work over about three months, carrying [illegible] it at long intervals. There was no canvass to be got [illegible] for the sacking, and that has been made here. Nothing remains [illegible] the stretch the sacking upon the frame; and as the frame proves successful, after one or two alterations from the first [illegible] I the [illegible] likely to prove so likewise. The whole affair will be very light and portable, - but as I have never seen Mr. Whiting's Camp bed, his [illegible] may be still better. There is a great variety of Camp beds in this country, every body [illegible] by his camp. I have been thinking of getting a patent for mine if it should prove a good one, and setting up [illegible] as a manufacturer of the article on [illegible] here; but this is all moonshine, as the patent would probably not pay for the cost [illegible]. Along with it I had [illegible] for [illegible] pieces of camp furniture, but the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. - I am also getting printed a couple of small tables that I got ready eighteen months or [illegible] [illegible] in [illegible]. - Besides that another small affair, an arrangement for combining two pocket drawing instruments in [illegible] [illegible] of an instrument maker here, and it will I think turn out a useful thing in the field.

I wrote James about the first of August and asked him to [illegible] and [illegible] the letters of [illegible] in his [illegible]. It is [illegible] to receive [illegible] [illegible] forwarded them but as they have not come I fear my letter did not [illegible] him; but [illegible] it was mentioned in a letter to [illegible] that [illegible] [illegible] [illegible]. - I wrote [illegible] last week and Mary [illegible] before. - [illegible] [illegible] the [illegible] news would be along here about this time, that [illegible] the war in Europe has made them give up their [illegible].

I weighed myself here the other day and found my weight 134 lbs. [illegible] about my average, and [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] Please give my love [illegible]

[illegible] [illegible] [illegible] [illegible] [illegible]

[Continued from page 37]

putting at the end opposite to the lens such a prism with its long side towards the lens (fig. 23). The rays will then enter the prism with their axis at right angles with this face, strike one of the opposite faces at an angle of forty five degrees, be totally reflected to the other [illegible], strike that at the same angle and be totally reflected again, issue from the front of the prism at right angles with it and parallel to the course at entering, and finally come to a focus upon a silver plate placed by the [illegible] of the lens. This would bring the length of the box down from six inches to about three. It would also put the image at [illegible] a troublesome place to see at once, on the [illegible] side of the plate ~~that~~ [illegible] the lens; but the equator and hour lines might then be drawn on ground glass or other half transparent material instead of on silver so that this would be seen from above.

But the rays after the double reflection of this prism [illegible] the end opposite where the lens is, might [illegible] enter a second prism (Y) and be again doubly reflected, in the same way as before, to a silver plate at the side of the first prism. This would bring the [illegible] with a six inch lens down to a length of two inches. Of course, instead of prisms plane mirrors might be used.

[Continued on page 41]

[illegible], [illegible], 11 Jan. 1870.

To the Con[illegible] of
Public Works Accounts, Bengal.
Fort William.

Sir,

Your favor of day before yesterday came to hand yesterday afternoon, informing me that the Executive Engineer of the 1st Presidency Division was ready to pay me [illegible] on account of travelling allowance for travelling done in the month[illegible]. Later in the day came a letter from the Executive Engineer of the [illegible] [illegible] a transfer receipt for the same [illegible] for the former travelling allowance. It will not therefore be necessary for the Executive Engineer to pay [illegible] unless you should inform me by the return of this that it will be more convenient to have the payment made in that way.

Yours truly,
[illegible]

[illegible]

[Continued from page 2]

~ [illegible] lower reminder or vernier. The time should be [illegible], of course, when the event's image is between the time lines and will be of different time, and will have the correction by the equation of time to get the mean time. The deflection will also change somewhat the time at which the sun will cross between the time lines set to a given angle, when not on the prime vertical, but that can be allowed for, if desirable, by a little table.

Adjustments. – The adjustments of the instrument are essentially the same as in other altazimuth compass and transit theodolites, and need no particular description here.

Materials and Dimensions. – The other apparatus should be made of brass or other material such as is suitable for the other apparatus of the compass, or for transits and theodolites. The dimensions given of different parts seem the best for a transit and with a main plate of six or seven inches across, but may be varied somewhat. Smaller dimensions would give less exact results, but might be suitable for a light instrument for rough but quick work. Larger dimensions would give greater exactness and might be used for large transits or theodolites.

Claims.

Newness.—The newness of the invention lies in:

1. Putting the polar apparatus on the bottom of [illegible] plate of a transit or compass or theodolite, or on the bottom of a plane table [illegible] instrument

2. Putting the polar axis directly on a horizontal [illegible] axis.

3. Setting off the latitude by means of [illegible] the latitude arc by a single vernier arm, [illegible] upon the polar axis, or by a latitude arc [illegible] the polar axis and graduated by its [illegible] centre.

4. Having the outer hollow arm of the polar axis [illegible] about that axis so as to turn the declination apparatus.

5. The various forms of the declination arc [illegible]

6. Setting the declination arc [illegible] parallel to the polar axis, [illegible] meridional plane.

7. Fixing the declination arc [illegible]

8. Fixing the [illegible] of the declination arc [illegible] is [illegible] the hollow arm [illegible]

9. The lens bar with one prism [illegible] the sun's rays at right angles by single reflection.

10. The lens bar with one prism [illegible] the direction of the sun's rays by double reflection.

..tire by one half for the same lens.

11. The lens bar with two prisms or pairs of mirrors to reverse the direction of the axis rays [illegible] and shorten the bar by one third.

<u>Advantages</u>. — The advantages of this new polar instrument are:

1. The whole of the upper plate is left free for the telescope and its supports and for the common magnetic compass; or, in the case of a plane table, for the [illegible] or alidade.

2. The labor of making the instrument is lessened by the arrangement of the horizontal latitude axis, and this also enables the outer cone of the polar axis to be the turning one.

3. The instrument is made simpler and lighter by [illegible] of the latitude [illegible] on the polar axis over a simple arm or fixed [illegible] [illegible]

4. The outer cone turning around the polar axis enables the declination axis to be placed near the latitude axis and to make the polar [illegible] more compact and therefore less exposed to blows and less in the way of the [illegible] of the instrument.

5. The smaller size and [illegible] of the declination arc and its supports also make the whole affair more compact.

6. The declination arc [illegible] is parallel to the polar axis although the declination axis to be between the latitude axis, and therefore more out of the way.

7. [illegible] the declination arc directly to the outer cone of the polar axis [illegible]

[illegible]

[illegible] apparatus simpler, [illegible] a part of the bar, or the whole of it.

9. The lens bar with one prism or mirror to turn the sun's rays at right angles by single reflection, with the bar to be hung in the middle without danger, even in high latitudes, of [illegible] coming to the main [illegible] [illegible] under [illegible] hours, or nearly that from the [illegible] and not even then if the prism be placed [illegible] the right angled bar, and the [illegible] be hung midway between the prism and one end of the bar.

10. The prism or pair of prisms to reverse the direction of the sun's rays by double reflection enables the bar to be shortened one half.

11. The two prisms or pairs of prisms, to reverse the direction of the sun's rays twice, not only shorten the bar to one third of the focal length of the lens but bring the sun's image to the end of the bar opposite to the lens, where it can be easily seen

Description of the accompanying drawings.

Fig. 1 is a perspective view of the whole instrument [illegible] mounted.

Fig. 2 shows a section in the latitude axis with bearings inside [illegible] and the prism [illegible] with the hollow [illegible] outside.

Fig. 3 shows a section [illegible] the latitude axis with bearings [illegible] and the hollow [illegible] [illegible]

Fig. 15 shows in elevation a declination arc joined by two arms ~~at the~~ inclined [illegible] axis to the under end of the polar axis in such a way that the zero line is parallel to the polar axis [illegible] to the equator; but with a dip [illegible] two turning near the middle about the same declination axis and bearing a vernier near the centre of the declination arc and nearly zero when [illegible] parallel to the equator.

Fig. 16 shows in elevation a declination arc joined in same way as in fig. 15 to the polar axis and with the vernier arm turning about the declination axis in the [illegible] way, but joined in the middle to the middle of the [illegible].

Fig. 17 shows in elevation a dip with two arms of which [illegible] the declination arc of forty seven degrees which is joined by an arm to the declination axis in the middle of the polar axis near the [illegible] axis.

Fig. 18 shows in elevation a [illegible] of the the declination axis upon a vernier arm fixed to the middle [illegible] turning part of the polar axis at a right angle [illegible] and with the degrees of [illegible] of which [illegible] arm that joins the declination arc to the declination axis.

Fig. 19 shows in perspective a dip with two [illegible] [illegible].

Fig. 20 shows in perspective a pyramid having a square at the base.

Fig. 21 shows in perspective a right angled cone with a plane at right angles and with the triangular end of the cone parallel to the horizontal axis.

Fig. 22 shows in perspective a right angled cone with a plane at right angles and with a triangular end parallel to the horizontal plane.

Fig. [illegible] shows in perspective a cone with a plane [illegible]

[illegible] shows in perspective a cone with a plane [illegible]

[illegible] shows in perspective a cone with a plane [illegible]

[illegible] shows in perspective a cone with a plane [illegible]

Fig. [illegible] shows in elevation a cylinder with its axis at right angles to the picture plane and with a plane [illegible]

[illegible]

[illegible] Dec. 1870.

[illegible]

[illegible]

Calcutta, 9th Dec. 1793.

Calcutta, 8 Dec. 1870.

Capt. A. H. Brandreth, R.E.,
Asst. Sec'y to the Panjab Govt.
in the Public Works Dept.
Lahore.

My dear Sir:

Many thanks for your favor of the third with a copy of the printed reports. As I may have left before the fifty copies come, please send them to the care of Messrs. Atkinson Brothers, No. 7 Old Court House Street, Calcutta.

The reports are very well printed and very nicely corrected, but of course it would be a miracle if no errors had been made. I will send you tomorrow a printed list of twenty of them, some of which are important; and two or three of which were probably in the manuscript written plainly, as I find them in the copy I kept. From this list you can have the government copies corrected, and if you do not think it worth while to print the list for that purpose, I can get printed for my fifty copies here to put in after the title page.

Yours very truly
Benj. Smith Lyman.

[illegible]

Columbia, 10 Dec. 87

[illegible] 14 Dec. 18[illegible]

[illegible] to Cape Breton.

[illegible] [illegible] bill of [illegible]
[illegible] a few [illegible] [illegible] to pay the and
[illegible] [illegible] with the [illegible] of [illegible]
[illegible] the acknowledgment of my land lot in the [illegible]
[illegible] last year, and that whatever may remain [illegible]
of what I owe you for your trouble in this matter [illegible]
[illegible] [illegible] Marshall Bros [illegible]
quite convinced that the total of the [illegible]
a time may have been, but think that the remainder [illegible]
enough [illegible] but leave a large share over for yourself [illegible]
also feel uncertain as to [illegible] my indebtedness [illegible]
[illegible] whatever [illegible] your [illegible]; but we will [illegible]
[illegible] a final settlement with my return to [illegible]
[illegible] to Cape Breton, unless indeed the land lot should
[illegible] [illegible]. I do not however feel especially anxious
[illegible] the price of the land at present, if it is safe from timber
thieves and [illegible] many [illegible] in its case. — I
wrote you [illegible] three months ago from Mauritius in the [illegible]
[illegible] [illegible] should send the bill in a [illegible]
[illegible] but my arrival here was delayed [illegible]
[illegible]
[illegible] [illegible] [illegible]
[illegible] [illegible] a fortnight at [illegible]
[illegible] [illegible] on [illegible] [illegible]
we have been over a month without [illegible]. This is
[illegible] in India, [illegible]; and will
[illegible] employed [illegible] it is [illegible]
[illegible] [illegible] [illegible]. [illegible]
[illegible] [illegible] [illegible]
a very large share [illegible] time. They and the [illegible]
not having a draughtsman and copyist [illegible] I have
[illegible] months out of the [illegible] I have been in the

[illegible], [illegible] 73

[illegible] Esq.
[illegible] Walnut St. Philadelphia

[illegible]

Your [illegible] [illegible] of [illegible] [illegible] forwarded [illegible] according [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] possibly have heard by this time [illegible] [illegible] [illegible] [illegible] [illegible] go [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] for the British Government. [illegible] [illegible] [illegible] when I may return and on the way I may pass [illegible] [illegible] [illegible] [illegible]; so that it will be very likely more [illegible] [illegible] from now before I reach home. In the [illegible] [illegible] [illegible] [illegible] [illegible] doubt have [illegible] [illegible] found [illegible] [illegible] [illegible] [illegible] [illegible] believe [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] trust it may go [illegible] [illegible] [illegible] [illegible].

Yours very truly,

[illegible]

Calcutta, 21 Dec. 1870.
[illegible]

[illegible]

You speak in your letter of the cost of postage as of [illegible]
[illegible] me to write more; but although your letter came
[illegible] nothing [illegible] has come from [illegible]. A letter from
[illegible] a long [illegible], which I hope to [illegible]
[illegible] came to hand a week ago after two days
[illegible] waiting; the Post office [illegible] Clerk who [illegible]
was punished by making him refund the postage required for
forwarding it, and since that no letters [illegible] have come, so
that I am somewhat afraid that to his vexation he has been
destroying them, although he could hardly think of [illegible]
postage [illegible] collected on them. I wish I saw the play of [illegible]
which is [illegible] in the [illegible] by [illegible] of the [illegible] and gentlemen
[illegible], but remember nothing of it but the name. I hope nothing
will happen to prevent your carrying out successfully your
[illegible] of going to Hamburg. It is [illegible] possible [illegible]
[illegible] the [illegible] myself in [illegible] [illegible]
[illegible] [illegible] the [illegible] year [illegible]
[illegible] or [illegible] [illegible] the [illegible]
[illegible] of the [illegible] [illegible] he has [illegible]
[illegible] in [illegible] [illegible]
He [illegible] had not [illegible] very [illegible]
though I had [illegible] a copy [illegible]
a week or ten days before [illegible]. This [illegible] I offered to
[illegible] my printed copy or [illegible]
[illegible] copy [illegible]
[illegible] the [illegible]
however [illegible], and [illegible]
me "the [illegible], &c." [illegible]
also said that he [illegible] attention [illegible]
[illegible] and [illegible]
[illegible] [illegible] year [illegible]
[illegible] Mr. [illegible]
[illegible]
[illegible] about the [illegible]

Calcutta, 18 Dec 187[illegible]

[illegible] Mr. [illegible]:

Enclosed herewith I send a copy of my speci-
fication and drawings for the solar compass patent, which you will please
[illegible] to the Commissioner of Patents, Washington, D.C. with the
specification and the needful papers [illegible] and [illegible]
[illegible]
[illegible] in your favor [illegible]
[illegible]
[illegible]
in a foreign [illegible], but if it should prove necessary you will
send me [illegible] and [illegible]. The drawings are [illegible]
one on [illegible] board and the other on drawing cloth, and are signed
[illegible] and in other respects are I believe all right. I
[illegible] of trifling errors in the drawings, but none I believe of
[illegible]. The one on drawing [illegible] should be [illegible] the [illegible]
[illegible] and [illegible]
[illegible] you can [illegible] the [illegible]
[illegible] for a photographer [illegible]
[illegible] by [illegible] mail [illegible]
[illegible], you will please [illegible] the model in [illegible]
[illegible] with these papers to the Patent Office and at the same
time forward a United States Treasury receipt for thirty five dollars
to cover the patent. This receipt may be got in the back part of the
custom house, where they will at the same time give you a duplicate
of the receipt for your own keeping. The fee would only be twenty five
dollars in consideration of my having paid ten for the caveat, but I
wish the caveat to be kept alive because I intend [illegible]
out another patent under it for other improvements [illegible] it is
likewise the caveat. With the wooden model do not send two or three
small detached pieces that were unfinished work upon these further
improvements, and [illegible] left in company with the completed model.
These and these drawings [illegible] a draftsman [illegible] from my
[illegible] and they may not be quite correct in some details.

"Copy"

50. W. Eaton; 2 Jan. 1871

Mr. Wm. W. Turner.

Sir: [illegible] this morning [illegible] waiting for the same [illegible] you for [illegible], and [illegible] give [illegible] for the nine hours and a half.

[illegible] that you did not keep to your agreement [illegible] instead of speaking off without the slightest notice.

I send also your knife that you left on the table.

Wishing you [illegible] a happy new year [illegible]

Yours truly,

[illegible]

[illegible]; 3 Jan. 1871.

Capt. A. M. Brandeth C. E.

Asst. [illegible]

Public Works Department

My dear Sir:

Your favour postmarked 29th Dec. is just [illegible] asking for the general map [illegible] with the [illegible] and I send it herewith. I understand [illegible] to be included with the maps that Col. [illegible] [illegible] to bring [illegible] and am extremely sorry to have [illegible] such delay by [illegible].

Yours very truly,

[illegible]

Calcutta: 4 Jan. 1871.

My dear Mr. Lesley:

I send you herewith a second copy of the patent drawings in duplicate on bristol board and on drawing muslin, properly signed and witnessed, together with a copy of the specification properly signed and witnessed and sworn to before the Consul. All ready to be sent to the patent office except that you will have to put on [illegible] stamps upon the petition that precedes the specification, as it is also [illegible] give a power of attorney to you to transact any further business concerning the patent in the patent office. [illegible] I did not have the [illegible] to think such a stamp would be necessary in a foreign country and we had none here; but if [illegible] either the American or Indian stamp [illegible] the American government is the only one in the case that could [illegible] legally [illegible] invalidating the instrument [illegible] American stamp. The Indian stamp would be [illegible] having [illegible] should have been [illegible] on the left, but if the patent office insist upon that you will [illegible] to pay fifty cents [illegible] to get photographic copies of [illegible] photographing, and the fee can be added [illegible] before the patent is issued. The [illegible] specification last week I neglected to have it signed and witnessed as required. I will send still another copy [illegible] signed, but no other copy of the drawings. If anything should happen to the copies sent I have still another copy [illegible] that can be made use of [illegible]. You will please send with the drawings to the patent office both the model [illegible] with the small detached pieces that I have left, and that belong to the [illegible] and thirty five dollars [illegible] for the amount paid [illegible] Philadelphia. I am very much obliged to you for all the trouble this affair is giving you, and am glad [illegible] not troubled you to get the drawings made [illegible]. I [illegible] drawings, but nothing [illegible]. [illegible] and the specification printed for [illegible] as I suppose [illegible]; for a number of [illegible] in the patent office.

a

Calcutta, [illegible] Jan. 187[illegible].

[illegible]: Nothing has come [illegible] in the way of [illegible] since a letter from Mary already [illegible] and [illegible] something has [illegible] probably a letter [illegible] the California mail again [illegible]. The [illegible] are of the [illegible] before [illegible] here. [illegible] has been decided [illegible] last evening from Col. [illegible]. He said he had [illegible] letter from the Government of India [illegible] it had been decided not [illegible] hand, and here it is: "The Governor General in Council has been [illegible] Report [illegible] of the [illegible] of employing your services in [illegible] the reviewing the information [illegible] and the means at the disposal of the Government [illegible] for prosecuting further [illegible] Government [illegible] in Council [illegible] it is [illegible] necessary [illegible] any official agency. His Excellency [illegible] Council accordingly [illegible] your [illegible] proposes to terminate your agreement from this date [illegible] your salary up to date and one month's salary in addition. You are entitled to a free passage to New York under your agreement.— 2. On application [illegible] an order will be given for the payment to you of any portion of the [illegible] you [illegible] and you may draw the balance from Mr. [illegible] in America." In answer to this Col. [illegible] said the termination of the agreement was not [illegible] dissatisfaction with the manner in which the work had been done, and that the decision had [illegible] made before his arrival, which was about a week or ten days ago. [illegible] the [illegible] they are so disappointed at finding no more oil in the [illegible] that they are not disposed [illegible] any more about oil at all in India. The accounts from [illegible] have not been very encouraging, and although [illegible] have [illegible] more [illegible] from any [illegible] yet the [illegible]

3

[illegible] if the French might very well hold out a few months. [illegible] doubt [illegible] many will after all be [illegible] [illegible] therefore hardly worthwhile to go there [illegible]. In Europe too I should be sorry to go home without staying a few months in Germany, France or England [illegible] [illegible] Italy. It seems a pity too to leave the [illegible] [illegible] of China and Japan, and the cost is about the same [illegible] going that way [illegible] although [illegible] [illegible] They [illegible] to London that way [illegible] [illegible] come from [illegible] by [illegible] [illegible] tomorrow [illegible] baby [illegible] I am [illegible] [illegible] for me any work [illegible] away [illegible].

The Christmas holidays are just over, and [illegible] [illegible] all the [illegible] [illegible] [illegible] [illegible] [illegible] the first day after [illegible] just [illegible] and called upon [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] I was sorry not to see the [illegible] [illegible] to tell me all [illegible] although [illegible] [illegible] to go there [illegible] [illegible] dressed in [illegible] clothes and around the [illegible] [illegible] many came from outside [illegible] this [illegible] [illegible] were not [illegible] for the women were not [illegible] of course all the [illegible] [illegible] Christmas [illegible] and [illegible] and hilly [illegible] [illegible] an annual custom [illegible] for [illegible] [illegible] grounds a [illegible] [illegible] "Green Pickles." I went out [illegible]

[illegible]

[illegible] [illegible] [illegible]

Your affectionate son,
[illegible]

Salem, 6 Jan. 18[illegible]

[illegible] Scott,

[illegible] Engineer,

Montreal.

[illegible]

[illegible]

[illegible]

Calcutta; 6 Jan. 1870.

My dear [illegible]:

The [illegible] [illegible] [illegible] after [illegible] [illegible] more than [illegible] months has at length decided not to have the [illegible] fields of Assam and Burma [illegible] and sent me two days ago [illegible] [illegible] says: "On reviewing the information already [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] Governor of India [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] in Council [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] any special agency. [illegible] [illegible] in Council accordingly [illegible] [illegible] [illegible] useful report [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] in addition. You are entitled to a free passage [illegible] [illegible] under your agreement." So I shall not be [illegible] [illegible] [illegible] [illegible] [illegible] in Assam. The geological survey [illegible] [illegible] [illegible] [illegible] so disagreeable that I am [illegible] to [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] to have a [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] in the Punjab where they counted on it, that they are [illegible] not to bother [illegible] [illegible] any further with oil any [illegible], [illegible] nothing of special motives for [illegible] [illegible] at [illegible]. — The gossip in the Public [illegible] Office for a couple of days [illegible] been that the Public Works Department [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] work done by the Public Works [illegible] [illegible] [illegible] [illegible] [illegible] to provincial governments, [illegible] [illegible] [illegible] [illegible] [illegible] the [illegible] [illegible] [illegible] [illegible] Department. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] and expect to sail from here about the twentieth [illegible] [illegible] [illegible] [illegible] [illegible] and Japan [illegible] as to reach home by [illegible] about the end of May and see [illegible] [illegible] [illegible] on the way. I trust [illegible] [illegible] [illegible] [illegible] [illegible] to America [illegible] with your family. — [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] a patent here of [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] I am getting a patent in America. It seemed possible that [illegible] [illegible] [illegible] might adopt the use of [illegible] [illegible] for the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. So I wrote my petition on paper stamped [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the permission to file the specification [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] against the use of the instrument by [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] in the [illegible]. [illegible]

Great Eastern Hotel, Calcutta, 9 Jan. 1877.

To the Secretary to the Government of India,
Public Works Department.

Sir: Col. Maclagan, R.E., Secretary to the Punjab Government Public Works Department, instructed me to bring the maps illustrating my final reports on the Punjab Oil Lands to Calcutta, for the purpose apparently of placing them by you; and I have for some weeks been anxious to take them to you and in showing them to give any verbal explanations that might be needed.

2. As the maps are the most laborious and important part of the work of the Survey and as the reports are based on them and supported by them, and as several copies of the maps might be convenient for reference, both at Calcutta, Lahore and Rawul Pindee and for use in the field; it has seemed possible that the Government would order them to be photozincographed, and they have been drawn with special reference to the requirements of photography. In photographing, they could be reduced, if desired, from their scale of $\frac{1}{6000}$ to $\frac{1}{12000}$ and still be distinctly legible. In order to keep them fresh and clean until photographed they have been framed (for the [illegible] expense of the Government).

3. If the Government should photozincograph them for its own use I should be glad to have fifty copies and to pay the additional expense of them. In case the Government should not photozincograph them I should be glad at my own expense to get at least some of them photozincographed, if possible, or at any rate photographed [illegible], or [illegible] admissible, at the photolithographic [illegible] New York. The expense of getting [illegible] number of copies in this way would be no greater than that of only one or two by tracing.

4. The maps have been made after the peculiarly American (particularly Pennsylvanian) style, in which the geology is made out chiefly by help of the topography, which seems to me far the best way of all for practical purposes. The addition of hundred foot underground contour lines of the oil-bearing bed of rock to show the position is an idea of my own. Indeed, beside the general [illegible] interest [illegible], one reason for my wishing them to be printed is a desire to make the [illegible] better known [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

Calcutta; 11 Jan. [illegible]

My dear Mr. Lesley:

I send you herewith a duplicate copy of the [illegible] specification [illegible] sent last week [illegible] [illegible]. The one sent week before last is not good for it was not properly signed and witnessed in addition to the signing of the [illegible] that accompanied it. If you [illegible] this copy please [illegible] an internal [illegible] stamp [illegible] upon the [illegible] before the specification [illegible] with my initials [illegible] the signing of the [illegible] [illegible] [illegible] a [illegible] of [illegible] [illegible]. I believe [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] every thing is [illegible] in order [illegible] matters [illegible] [illegible] which will be [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible]

necessary [illegible] [illegible] [illegible] accordingly while [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible]

50 Gt. Eastern, 17 Jan. 71.

Wm. Smith Esq.
Punjab Printing Co.

Dear Sir:
Yours [illegible] of today with one copy of the notebooks is at hand. I thought we decided to have them bound in sheep. It is not very important; but if the covers have not already been begun for the other copies they might be made of sheep; but have be made flush at the edges with the edges of the leaves, not projecting beyond them, as in this copy. I also send another [illegible] of the size to which the [illegible] (and covers) should be trimmed down; as in this copy even the leaves are too large. Yours truly
Benj. Smith Lyman

50 Gt. Eastern, 17 Jan. 1871.
J. [illegible] Muller Esq.
Dear Sir:
I am just sending some boxes to Philadelphia by a sailing vessel to sail the 20th Jan. and to arrive in about four months. If you would like to send any thing in the boxes I should be happy to take charge of [illegible], if you will send it here to-morrow night. I shall be going myself to Philadelphia in about a month (after a trip to Delhi and back) and shall arrive there about the end of May by way of China and California, and should be glad to take anything for you there. I should also be glad to take anything for Mr. Kline either by the sailing vessel or with myself; but I do not know his address. If you could [illegible] know or send this [illegible] [illegible] you would [illegible] [illegible] [illegible]

[illegible]

No 50 St. Easton. 25 Jan. 97.

Dear Miller:

I am invited
by and see some Hindoo gilli-
fication this evening at a private
house on account of the holidays;
so I beg you will not get an
opera ticket for me but let
me leave you early after
dinner, for I am anxious to
improve the few opportunities
that remain for seeing the
native customs.

Yours very truly
Rev. Smith Lyman.

[illegible] [illegible] ... [illegible] Hindoos (not a [illegible] [illegible] there; belong to one of the [illegible] [illegible]. There are however [illegible] many [illegible] and educated Hindoos who still [illegible] & [illegible] for the reason that such men are [illegible] all the [illegible] [illegible]. After the meeting of Monday evening was over [illegible] [illegible] [illegible] [illegible] room and regaled with bread and butter and [illegible] [illegible] [illegible] [illegible] dinner of the [illegible]) and had a very pleasant talk with one of the [illegible]. He said at least he was writing a book in English on the philosophy of [illegible] and wished to send one [illegible] [illegible] [illegible] when it should be published [illegible] Sunday [illegible] [illegible] [illegible] [illegible] daily [illegible] together [illegible] past the house of the [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] Pundit, who is [illegible] [illegible] [illegible] [illegible] and [illegible] [illegible] [illegible] [illegible]. [illegible] very [illegible] and [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] think of [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] and [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] Hindoos [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] and [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] have been [illegible] [illegible] [illegible] [illegible] [illegible] and [illegible] [illegible] [illegible] and [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. All [illegible] [illegible] in [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] and good [illegible] [illegible] [illegible]. The [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] on the [illegible] many [illegible] Hindoo and Mussulman holidays.

By [illegible] Pundit is waiting to give me his daily lesson and I must break off.

Please give my love to all.

Your affectionate son.

Benj. Smith [illegible].

[illegible] of [illegible] from [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] ago. [illegible] [illegible] [illegible] [illegible] with [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

On arriving here this morning I found to my great regret that I had just missed meeting you and your family in Cuttack and must have passed you somewhere on the road,

No. 54 Great Eastern Hotel,
12th Feb 1871.

Baker Pennsylvania Chambers.

My dear Sir:

I arrived here yesterday morning, and shall be happy to see you when you find it convenient to call. My room (No 54) is the same one as I had on

Yours very truly
Benj: Smith Lyman.

Asiatic Society's Rooms.

Calcutta, 14 Feb. 1871.

Dr. F. Stoliczka

Secretary of the Asiatic Society.

Dear Sir:

I am just leaving India
at no intention of returning and
esire to retain my privileges as an
rdinary Member of the Society. I
ish therefore to avail myself of the
rovisions of Section 14 of the rules
the Society; and have the honor to remain

Your most Obedient Servant

Benj. Smith Lyon

Calcutta, 15th Feb. 1871.

Wilson's Hotel; 17 Feb. [illegible]

My dear Atkinson:

Will you kindly send by mail the accompanying [illegible] copies of my Punjab Reports [illegible] Messrs. [illegible], Scott, and [illegible] as the address is written on each? And please put with each a set of the eleven photographs [illegible] stitched on to the reports if convenient, but that is not important. Also please give the bearer who brings this two sets of the maps, and keep one yourself to go with your copy of the reports. Please also pay for a year's subscription to the Journal of the [illegible] Agri-Horticultural Soc.; and if it is not [illegible] send it [illegible] have it sent to you first so that you can forward it to me. This is because the postage on printed matter is by agreement to be paid in advance. But if the publishers will undertake to send the direct to me in [illegible], taking the needful money for it from you, you might give my American address to them and save yourself further trouble about it. My subscription has just expired, last week, but they are still sending to me and it will only be necessary to [illegible] the address. Do not let them continue to send it beyond the year paid for [illegible] a further subscription [illegible] [illegible].

[illegible] for this additional trouble I [illegible].

Very kindly yours, [illegible]

Gofal Khan has been my Bearer and Khitmutgar for nearly fourteen months and is now discharged merely because I am going home. He is active, intelligent, well trained in his duties, careful, and uncommonly honest and faithful. He has travelled with me to Benares, Lucknow, Agra, Delhi and Lahore, to Rawul Pindi, Murree, the Salt Range and numerous other places in the Punjab; and with former masters has travelled round the [illegible]. His experience in this way makes him a remarkably good servant for travelling, and he bears with great patience the hard work of marching with a camp. I am extremely sorry to part with him. He talks English & also [illegible].

Benj: [illegible]

Calcutta, 17 Feb. 1871.

Steamer [illegible], Singapore, [illegible] Feb. 1871.

[illegible] [illegible] Chaudhuri,
[illegible] Society's Library.
[illegible]

[illegible]

[illegible] please find the [illegible] of
[illegible] [illegible] [illegible], Rs. 57/95 99 7/ [illegible]
[illegible] [illegible] [illegible] [illegible] at Rangoon [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] for [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] and take [illegible]
[illegible] [illegible] [illegible] [illegible] give you [illegible]
[illegible] [illegible] [illegible] [illegible] until you [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible]. In case it should [illegible] you please pay [illegible]
[illegible] for the [illegible] (three or four [illegible] only) [illegible]
[illegible] pattern [illegible] [illegible] [illegible] [illegible]
[illegible]. [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] a few weeks [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]. Also [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] the Proceedings
[illegible] [illegible] [illegible] [illegible] by [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] with you [illegible] for [illegible] [illegible] [illegible]
[illegible] by a sailing vessel [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] In case [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] with them a [illegible] Sanskrit dictionary [illegible]
[illegible] [illegible] if you can find [illegible]. I should like [illegible]
[illegible] [illegible] translation and also a Sanskrit copy. [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] original [illegible]
[illegible] [illegible] [illegible] [illegible] very well [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible]

A bord du [illegible] Chine, à Singapore, [illegible]

Mon cher Ingersoll : votre bien bonne lettre du 16 août est arrivée [illegible] était déjà fermé ; il n'y avait pas alors moyen de vous faire parvenir une réponse. Les nouvelles sont heureusement [illegible] à [illegible] la ville est encore une fois ouverte et que les lettres peuvent y arriver. [illegible] ai été bien sensible de ce que vous m'avez écrit que vous aviez été forcé [illegible] dans [illegible], vous avez été toujours si paisible et si peu inclinés à [illegible] guerre ; mais [illegible] bien que [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] vous [illegible] [illegible]. Vous [illegible] bien croire que j'ai [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] surtout [illegible] [illegible] pendant [illegible] [illegible] [illegible] obligé presque tous les jours. [illegible] après la date de votre lettre. [illegible] [illegible] que [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] est [illegible] dangers encore plus grands de la [illegible] [illegible] [illegible] [illegible] siège. La guerre [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] bien que les dangers [illegible] [illegible] vous [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] que [illegible] [illegible] [illegible] je n'ai [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] pas [illegible] grand [illegible] [illegible] [illegible] français [illegible] [illegible] dans une [illegible] guerre. Il est [illegible] français [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] avait déjà fait [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] affecté [illegible] [illegible] [illegible]. Les [illegible], [illegible] aujourd'hui [illegible] que [illegible] [illegible] progrès [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] favorable à la [illegible] [illegible] [illegible] [illegible] bien vous [illegible] votre [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] quelques uns, [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] pour les envoyer plus tard [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] à cause de la guerre. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] que j'ai été [illegible]

A fair lady was Mrs. Kinnear,
Who everywhere made herself dear;
For she quietly smiled
On man, woman and child
And gained herself friends far and near.

Mrs. Baldwin so bright and sunshiny
With children, some large and some tiny,
Both genial and witty
Could sing a child's ditty,
Or write you a grammar of Chiney.

A certain tall Captain named Freeman
Was fond of a girl or a wee man;
He said: "Let us play
With the children all day!"
Said this kindly and gallant tall seaman.

A ticklish young fellow was Gould,
Uneasy and hard to be ruled;
He said with a shout:
"Oh, let me go out!"
This fellow so wild and unschooled.

O Boy! for your beef or your mutton
I care not a fig nor a button
Nor yet for pig's feet;
But anything sweet
I swallow instanter, though Sutton.

A well bearded fe[illegible] named Siddy
Knows how to be grave and be gay,
Can read you Chinese,
Or play fox and geese,
Or even turn night into day.

There was a fine gentleman Blac[illegible]
With two pretty girls at his back.
This lively young pair,
So good and so fair,
Had charms for him [illegible]

That [illegible] lady [illegible]
Dares to [illegible],
With two little nieces
She goes where she pleases
Nor at steamers nor railroads [illegible]

On noble stock grafted a [illegible]
Her name is not [illegible]
Though the [illegible] new,
Her numbers are few,
But [illegible] you may say is a Lyon.

That praiseworthy dame Mrs. Pa[illegible]
Was good from her head to her feet;
[illegible] and so mild,
So meek like a child,
Her heart was [illegible]

That excellent man Doctor Adams
Attended sick misses and madams;
From the library took
And lent you a book,
Or played violin, this most versatile Adams.

Captain Fessenden was a bold skipper,
From the Southern Cross up to the Dipper;
He steamed and he sailed,
His heart never failed,
And he always was lively and chipper.

Captain Thomas, a bluff harbour master,
Said: "Make your old steamer go faster
(For so he would talk)
Or I'll get out and walk,"
And in less than a minute go past her.

There was a great preacher [illegible]
With a face beaming sunny and [illegible]
From the heathen Chinee
He comes over the sea
And on Sundays [illegible]

135 South Tenth Street, Philadelphia, 9 June, 1871.

Professor Joseph Henry,

Smithsonian Institution,

Washington.

My dear Sir:

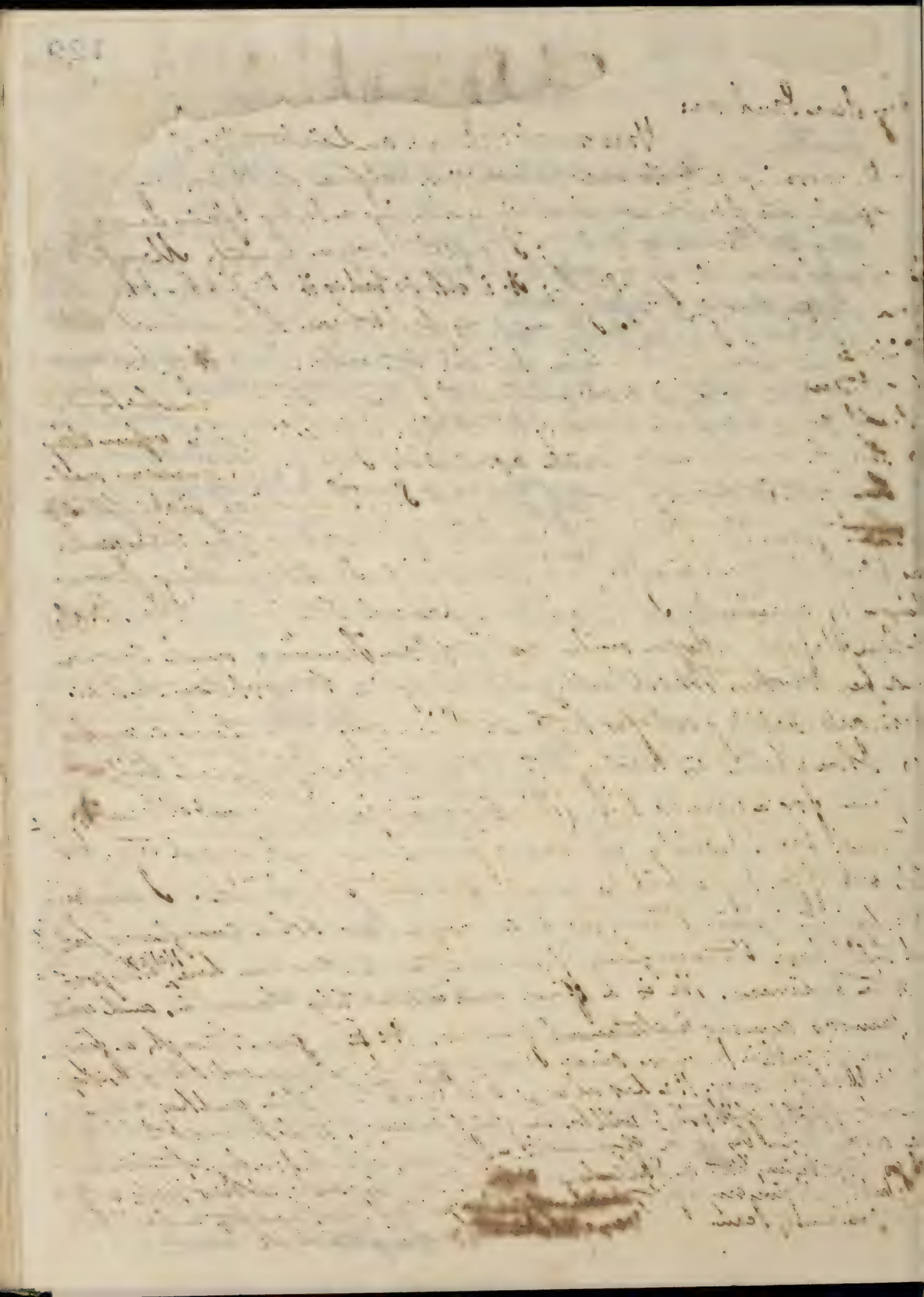
[illegible]

185 South Eighth Street, Philadelphia, [illegible]

Dear Mother:

[illegible] with him. — I heard [illegible] from [illegible]
[illegible] in the [illegible] matter, and they seemed to make a great
[illegible] from him. — [illegible] the very
just now; but I am not very anxious on that score, and
[illegible] case of no great sum of money be earned this year
[illegible] more [illegible]. — The present [illegible] is ready but
[illegible] to arrange my [illegible] affairs and shall probably
[illegible] again on [illegible], perhaps on Monday. [illegible]
[illegible] hope to go [illegible] to spend a few days.
Since writing you the letter by [illegible] came to hand a
[illegible] of [illegible] December, [illegible], [illegible]
[illegible] place where they are in China, [illegible]
[illegible] friend Mr. [illegible] Richardson [illegible]
[illegible] is a very nice man and [illegible]
[illegible] Session; and he has a member of
[illegible] very agreeable, acquaintance of
[illegible] and [illegible] very glad to see me. He was formerly
[illegible] China [illegible] been there by [illegible] occasions.
[illegible] very [illegible].

Your affectionate son,
Benj Smith Lyman.



Northampton, 21 June 1791.

135 South Fifth Street, Philadelphia [illegible]

My dear Aunt:

I was very agreeably surprised on my arrival here yesterday to find you and [illegible] letter. [illegible] thought of occasioning you the trouble of putting pen to paper.

It is really [illegible] that I did not know in India that you would be glad to [illegible] dry goods of that country for I should have been delighted to serve you as well as I could in that way, as well as in buying Indian, China or Japanese curiosities if you liked. Making such purchases is one of the standard amusements of travellers in those regions.

[illegible] now more particularly to say that I am just going to send to a friend in Calcutta for some more Rampore Chuddahs, and could order at the same time, if you like, anything of that kind for you. I expect to give this friend (a native) something for his trouble, and he will any [illegible] take also a commission from the merchant, as the custom [illegible] that country; so you need not be afraid of giving trouble. I think the friend would even be competent to select a Cashmere shawl of [illegible], for in such a case I would take the advice of some friend [illegible] [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] of the fashion [illegible] [illegible] greatly widened and he is [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. He has a friend engaged in the shawl business; and [illegible] [illegible] friend of mine [illegible] would no doubt give advice in the case of purchasing a costly shawl. Besides shawls and Rampore Chuddahs there are [illegible] [illegible] to be had [illegible] twenty five [illegible] dollars. [illegible] will [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

135 South Fifth Street, Philadelphia, 5 July [illegible]

Edward Miller Esq.
4039 Baltimore Avenue.

My dear Sir:

On returning home from Massachusetts I have found your favor of the twenty-ninth of June, and hasten to send you herewith your Lewis draft on you as you request. It should have been sent before, but until I looked at it today my impression was that it was a mere receipt that would be balanced by the one I gave you. As to the correction of your calculation I only fear that you were mistaken in amount, but so many other things have been on my mind that this had quite slipped from my thoughts.

I am glad to hear that you have good news from your [illegible]; and hope that your own health will soon improve.

I am off to Washington again this afternoon for a day or two so I might pay my respects in person instead of writing.

Yours very truly
Benj. Smith Lyman.

Washington, D.C., [illegible] July 187[illegible]

To the Commissioner of Patents:

In the matter of my application for letters patent for an improvement in Steam Engines, I hereby amend my specification by striking out the eleven claims for reverses where they stand on pages eleven and twelve and substituting therefor at the end of the specification [illegible] the two following claims:

1. [illegible] [illegible] plate [illegible] or [illegible] on the bottom of [illegible] or other like moving instrument.

2. [illegible] [illegible] or [illegible] [illegible] [illegible] of the [illegible] by [illegible] of [illegible] from one or more [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible].

Benj. [illegible]

138 South Fifth Street Philadelphia, 7 July [illegible]

Dear Mother:

Your favor of the fourth was here on [illegible] my return from Washington. [illegible] I thank father for forwarding the letter to Concord (or more [illegible]) and another there here besides Mary's all of which were [illegible] received. I would send you Mary's but it seems to have nothing in it that would be new to you, but rather a summing up of what she has already written you about her experiences and surroundings. She speaks of [illegible] that she is a little homesick, but perhaps not seriously, [illegible] it may wear off especially when her attention is taken up again by the [illegible] of the [illegible]. I find that Miss [illegible] is to spend next winter in Berlin, so she and Mary will no doubt see something of each other. Miss [illegible] goes out to study herself having laid up enough money to be able to spend a year and a half in Europe; [illegible] in company with Bishop [illegible] family. She will hardly see Mary at Cassel.

After leaving you I arrived the same evening at Concord by way of Worcester and Groton Junction, making close connections at both these places as well as at Springfield. Mr. Sanborn was already at Concord and took me to the boarding house, kept by Miss [illegible] Barrett, where a room had been engaged for me. He went away to Boston and Springfield on Monday morning but [illegible] stayed in Concord until Wednesday morning and then met him at Cambridge at Commencement. There too I met [illegible] who had come up from Jamaica Plain. We both attended the Commencement dinner, and after Sanborn had gone back to Concord I went through Boston to Jamaica Plain. [illegible] started early for Cambridge the next morning so as to be at the Phi Beta Kappa business meeting; and a little later I came [illegible] over there to hear the Oration and poem, and [illegible] Mrs. Sanborn there and Miss [illegible] and we all [illegible] together. We were greatly disappointed, however, for the orator was [illegible] and [illegible] and the poem was wretched trash, wholly inappropriate to the occasion. Sanborn and I tried

to the dinner although not a member, he having a [illegible] ticket, and James stood through the dinner and [illegible] we left at half past four to drive Kelly back in time for [illegible] Main dinner. I had been [illegible] a few minutes [illegible] that morning and saw a good deal more of him than [illegible] [illegible]; and was very much shocked to see how much broken he was in mind as well as feeble in body, a very [illegible] change since I saw him last three or four years ago. He seemed somewhat better however the next days and [illegible] and Sunday. Commencement day he had a very ill [illegible] the worst for some weeks. Friday he took a drive with Miss Clap and seemed to enjoy it very much, and Saturday [illegible] drove with her into [illegible] on business. They [illegible] he would take again to daily driving but up to that time he seemed to have no spirit for that. The horse is a new experiment, a nice, spirited, gentle beast that belongs to the sister of Miss Clap's [illegible] and came on two or three weeks to stay while the owner is gone on a visit to Europe. [illegible] is also in uncommonly bad health, but has more spirit in taking up and carrying out plans for [illegible]. Mr. Kelly seems to be very well though her eyes are still weak. She is to teach in Boston the coming season instead of at [illegible]. I left there Sunday afternoon and [illegible] [illegible] to New York and after [illegible] came here Monday afternoon. The next morning I found Mr. Seeley was at his house alone and likely to be here until the early part of next week when he goes to [illegible]. He had already been there once. Today I [illegible] the Rev. [illegible] is likely to pass that way with him on his way to [illegible], Ohio. [illegible] passed off here very [illegible] [illegible] the quiet afternoon, day before yesterday, I went to Washington and [illegible] a while in a few minutes [illegible] arrangements in regard to my [illegible] and it seems likely [illegible] all right within two or three weeks as soon as the purely formal delays are got through with. [illegible] in [illegible] [illegible] as any [illegible] assistant architect in the Treasury Department [illegible] [illegible] [illegible] at [illegible] and [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] and [illegible] [illegible] [illegible] [illegible] [illegible]

[illegible]

135 South Fifth St. [illegible]; Philadelphia; 7 July [illegible].

Dear Hannah:

Many thanks for your kind favor of the second; and I am glad to learn [illegible]

[illegible]

135 South Fifth Street, Philadelphia; 8 [illegible]

E. T. Cox Esq.
State Geologist,
Indianapolis, Indiana.

Dear Sir:

I have to acknowledge with many thanks the receipt (on my return home from India) of your first annual report of the Geological Survey of Indiana with maps and sections. I have had no chance yet to look at them completely, but anticipate much pleasure from doing so very soon.

I have the pleasure of sending you herewith my [illegible] [illegible] of [illegible] [illegible] oil [illegible]; and remain,

Respectfully,

Yours, very truly,

Benj. Smith Lyman.

135 South Fifth Street, Philadelphia

Prof. A. H. Worthen,
State Geologist.
Springfield, Illinois.

Dear Sir:

I have acknowledge with many thanks the receipt (on my return home from India) of the beautiful fossil crinoids of your Reports on the Geology and Palaeontology of Illinois.

I have the pleasure of sending you herewith my Report on the old Land Grants in Virginia and Kentucky; and remain, Dear Sir,

Yours very truly,

Benjamin Hale

135 South Fifth Street, Philadelphia, [illegible]

Hon. S. Merrill,
Governor of the State of Iowa,
Des Moines.

Sir:
I have the honor to acknowledge with many thanks the receipt (on my return home from a long absence) of the very handsome first and second volumes of Dr. White's Report on the Geology of Iowa.

As a small return I send you herewith my report on the Oil Lands of the Punjab with three maps; and have the honor to remain,

Sir,

Your most obedient servant,
Benj. Smith Lyman.

135 South Fifth Street, Philadelphia, 8 July [illegible]

My dear Aunt:

Your favor of the eighth did not come to hand until today. I shall be very happy to attend [illegible] a grey [illegible] chenille [illegible] in the [illegible] that you are going to send [illegible] [illegible] and [illegible], and [illegible] [illegible] [illegible] [illegible] will [illegible] [illegible] [illegible] [illegible]. As you make the question of your cloak [illegible] [illegible] on my [illegible] [illegible] [illegible] and as you are not [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] the order [illegible] [illegible] better be [illegible] [illegible] [illegible]. [illegible] indeed [illegible] quite incompetent [illegible] [illegible] [illegible] [illegible] [illegible] the [illegible], and any [illegible] [illegible] [illegible] [illegible] yet [illegible] to [illegible] them by [illegible] [illegible] explanation that [illegible] [illegible] remember [illegible] [illegible]. I think however that [illegible] [illegible] [illegible]; and [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] white. I regret that beyond [illegible] [illegible] [illegible] [illegible] character [illegible] engineer does not [illegible] [illegible]. If you think [illegible] [illegible] it would be better to order a white chenille instead of a grey one and get it dyed [illegible]. There is still time to make the change. I wished [illegible] [illegible] many white ones in [illegible] [illegible] but felt bound by [illegible] explicit instructions. The dyer [illegible] [illegible] [illegible] [illegible] and give them [illegible].

135 [illegible] [illegible] [illegible] [illegible]

My dear Aunt,

In the [illegible] [illegible] visit at [illegible] a [illegible] young silk with [illegible] [illegible] [illegible] to think of your Mary. I meant to have bought it [illegible], but forgot it together with some of my own clothing. [illegible] [illegible] than to come by express I have thought it better [illegible] you if you would rather [illegible] the silk [illegible] [illegible] [illegible] it seemed hardly possible that you would [illegible] [illegible] [illegible] in [illegible]. I have [illegible] [illegible] [illegible] and [illegible] were to go [illegible] [illegible]. [illegible] impossible that [illegible] or [illegible] [illegible] [illegible] to be at the [illegible] [illegible] gathering and could in that case bring the silk back more safely than the express would, if that would be quite soon enough.

After spending nearly a week at [illegible] I passed three days at Concord with [illegible] and then three days at Uncle Joseph's. I was much shocked at the great change in him since I saw him three or four years ago. He is extremely feeble in body but decidedly [illegible] in mind, [illegible] [illegible] [illegible] are [illegible] to [illegible], and worst of all seems to have a great [illegible] [illegible] all [illegible] about efforts to improve his health by exercise. His wife is much better in this respect although her health has been extremely poor since her return from [illegible]; she is very faithful in trying to improve her health. Miss [illegible] is back again from her long visit to New York, and seems pretty well. [illegible] [illegible] is well, but her eyes are still weak. She is to [illegible] [illegible] [illegible] [illegible] writing [illegible] [illegible] [illegible].

I am delighted to hear today that you are willing to make [illegible] [illegible] the good effects of [illegible] [illegible]. Please give my love to all, and believe me ever your affectionate [illegible] [illegible] [illegible]

GAE

[illegible] Philadelphia, [illegible]
8 July 1871.

Prof. Wm. A. Potter,
San Francisco.

My dear Sir,

I send you herewith four sets of the [illegible] belonging with my Punjab Report. Will you please keep one set yourself and kindly send one to [illegible], one to Mr. Rodgers and one to Mr. Ashburner? I would [illegible] with this inclosed [illegible] of [illegible] but his address.

Yours very truly
Benj. Smith Lyman.

[illegible]

To the Commissioner of Patents:

Your petitioner prays that letters patent may be granted to him for the invention set forth in the annexed specification.

Philadelphia, July 1871. Benj. Smith Lyman.

Specification.

I, Benjamin Smith Lyman, of No. 135 South Fifth Street, Philadelphia, in the County of Philadelphia and State of Pennsylvania, have invented certain improvements in [illegible] books and studies, of which the following is a specification:

Nature and Object of the Invention.

The first part of my invention relates to the use on a [illegible] of figures that are [illegible] so as to make it easy to subdivide [illegible] the main divisions of the [illegible] into very small portions; the object of this part of my invention being to do away with the [illegible] the main figures of small subdivisions.

[illegible] inconvenient to count and distinguish, and [illegible] up the surface of the rod as to make the markings less distinct and conspicuous; likewise to do away in great measure [illegible] the need of a sliding target and vernier.

The second part of my invention relates to varying the colors of the figures and [illegible] by ascending the feet upon the rod; so that [illegible] these distinct figures may be [illegible] without [illegible] for the feet as for the [illegible] divisions, but the feet are made [illegible] conspicuous.

Description of the Accompanying Drawing

The drawing shows [illegible] the markings [illegible] a foot of the rod extending [illegible] from the bottom.

General Description.

As shown in the drawing, the figures are so made with straight lines and square corners on [illegible] to make it easy to divide by the eye the tenths of a foot into hundredths of a foot up and down the rod. Instead of some of the square corners of these ones might be made [illegible]; and instead of little squares that make up part of

some of the figures circles or triangles or other figures might be used; or the figures might be otherwise joined but the square corners and little squares [illegible] the [illegible] of subdividing the length of the rod by the eye. The general shape of the figures might be somewhat different from that given in the above but this form [illegible] figures [illegible] divided [illegible]

The [illegible] by black figures on a light ground; the field on the contrary be marked by [illegible] figures upon a black ground. Other colors [illegible] may be used and more or less [illegible] different colors may be used for the figures [illegible] for the ground) from that [illegible] seems best to make [illegible], because the contrast between them is stronger and makes the edges of the figures visible at a greater distance than would be the case with other colors.

The improved level rod or stadia differs from other level rods and stadias only in the markings upon it, and not in the shape or material.

Claims.

I claim as my invention:

1. The use of figures made with straight lines and square corners or otherwise angular or pointed at ends, or shaped as to make the subdivision of the rod lengthwise easy to the eye.

2. The use of the [illegible] marks of color that are the reversed color of the figures and ground of the rod, or at least with a strikingly different ground.

Witnesses:

State of [illegible]

County of [illegible], ss.

[illegible] the above named petitioner, being duly sworn, deposes and says that he verily believes himself to be the original and first inventor of the [illegible] and in the [illegible] described in the foregoing specification; that he does not know and does not believe that the same was ever before known or used; and that he is a citizen of the United States.

Sworn to and subscribed before me this day of July 18[illegible]

Clinic.

Dear Richard:

135 [illegible] [illegible] [illegible], Philadelphia [illegible] 1871.

Dear Lizzy: Your favor of the [illegible] came to hand [illegible] a few days ago, having been [illegible] [illegible] [illegible], [illegible] to [illegible] [illegible] had by him [illegible]. [illegible] [illegible] [illegible] [illegible] ago in answer to a letter [illegible] [illegible] [illegible]. I trust you are all well and [illegible] urged my taking out the patent, so as to secure [illegible] in the [illegible] [illegible] [illegible] [illegible] that simple as the matter is it will bring [illegible] [illegible] [illegible] money as the solar compass patent [illegible] [illegible]. The royalty on each rod will be small ([illegible]), but there is [illegible] demand in the course of a year for [illegible] rods, say four hundred. You see I count my chickens before they are hatched. With two or three such patents I could manage to [illegible] along either in this country or in Europe without feeling obliged to do geological work [illegible] unappreciative [illegible]. I have indeed projects for several patents, some of which however may [illegible] out as magnificent as seems possible. But if these two or three first ones turn out as well as [illegible] seem likely to they will at least give [illegible] [illegible] in the other projects so as to see what they really [illegible] will be. I expect the solar compass patent to be issued [illegible] a very few days, and I will then be a full fledged patentee. There will be a small ~~patent~~ pamphlet to write [illegible] [illegible] [illegible] of the compass, as well as a few pages [illegible] [illegible] [illegible] of the new [illegible] [illegible], and perhaps a little [illegible] [illegible] [illegible] [illegible] [illegible], so that there is abundant [illegible] [illegible] [illegible] [illegible] in geological work. [illegible] [illegible] friends [illegible] [illegible]

a civil engineer, thinks [illegible] in the [illegible] an [illegible] but job for me in Al[illegible] [illegible] a [illegible] that has been an [illegible] a [illegible] [illegible] and he thinks [illegible] [illegible] [illegible] [illegible] there be something [illegible] [illegible] in [illegible] [illegible] have, as I said before.

Mr. [illegible] has obtained for me the [illegible] of a [illegible] of the [illegible] for me [illegible], at the [illegible] [illegible] the [illegible] [illegible] [illegible] [illegible] a [illegible] [illegible] [illegible] adopted [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] improvement [illegible] from [illegible]. A few days ago I induced the [illegible] young married woman [illegible] in [illegible] [illegible] my office [illegible] me every morning [illegible] o'clock [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] and while [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] as to make [illegible] [illegible] [illegible] and [illegible] [illegible] [illegible] for my second breakfast or lunch, about noon. She did not succeed perfectly, but did better [illegible] and it seems likely to prove quite a success. As I have already pretty much all the needful table furniture the addition [illegible] [illegible] causes no special inconvenience; and the [illegible] [illegible] there is a great saving of valuable time, especially in [illegible] [illegible] to go out for food in the heat of the day. The woman seems to be quite neat and says her husband is [illegible] [illegible] [illegible] [illegible] [illegible] experience in a restaurant [illegible] [illegible] [illegible] where [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] her husband [illegible] [illegible].

Mrs. George [illegible] arrived here [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] with Mr. [illegible] on Thursday on her way [illegible] [illegible] [illegible] [illegible] [illegible] here again tomorrow. I [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] all well. He came [illegible] [illegible] Mr. [illegible] [illegible] [illegible] [illegible] (or [illegible] [illegible]) [illegible] [illegible] and he remembered [illegible] [illegible] [illegible] [illegible] he came twice across the room to speak [illegible] me. [illegible] [illegible] that his daughter Mrs. [illegible] had a [illegible] daughter [illegible] [illegible] from here for [illegible] [illegible] husband [illegible] [illegible] [illegible] [illegible] [illegible] to [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] cough. [illegible] and [illegible] [illegible] [illegible] this week [illegible] [illegible] [illegible]. I [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]

135 South Fifth [illegible] Philadelphia, [illegible] Feb. [illegible]

To the Commissioner of Patents,
Washington, D. C.

Sir:

I send you herewith a petition for a patent for an improved [illegible] rod or [illegible] with specification and oath, as well as the drawing and a duplicate receipt for fifteen dollars of the United States Patent Treasurer. I will also send a model if you require it; but the drawing alone [illegible] exhibit the invention as fully as a model would do.

I have the honor to be,
Sir,
Your most obedient servant,
Benj: Smith Lyman.

1307 North Fifth Street, Philadelphia
17 July 97.

To the Hon. Secretary of the Treasury
of the United States,
Washington, D. C.

Sir:

I have the honor to forward herewith an original receipt (No. 1088) from the United States assistant Treasurer here for fifteen dollars deposited with him by me; and remain,

Sir,

Your most obedient Servt
Benj. Smith Lyman.

135 [illegible] ; 18 [illegible]

Dear Lizzy:

Your favor of Sunday [illegible] me the first news [illegible] that [illegible] to be [illegible] any [illegible] the [illegible] a [illegible] as you seem to speak of it as something [illegible] [illegible] It is very [illegible] [illegible] [illegible] and that it is [illegible] and [illegible] can be [illegible] no [illegible] not more than [illegible] very kind to [illegible] Uncle Edward ~~[illegible] physician~~ [illegible] [illegible] ~~Northampton~~ [illegible]. One of my class mates was [illegible] Rushmore [illegible] his [illegible] was [illegible] [illegible] he was [illegible] and became [illegible] a physician [illegible] I thought he had [illegible] in [illegible], and I [illegible] not [illegible] he had [illegible] [illegible] [illegible] this very [illegible] [illegible] man. He joined our class only in the junior year and never seemed to become very intimate with any classmates; he [illegible] very serious, perhaps a little [illegible] than the most [illegible] and not readily to understand [illegible], so that he was sometimes a little laughed [illegible] foreign [illegible]. I think I have been told that he [illegible] a distinguished man in his profession. He [illegible] quite poor while in college.

Mr. Henry S. Poole, [illegible] friends, is now [illegible] in [illegible] [illegible] [illegible] [illegible] [illegible] to have gone on the [illegible] [illegible] [illegible] [illegible] plans were [illegible]. The [illegible] General [illegible] [illegible] [illegible] one who would be more [illegible] [illegible] and perhaps [illegible] who would [illegible] little more willing to [illegible] up documents [illegible] [illegible] you [illegible] [illegible] to the General has given [illegible] [illegible] [illegible] any [illegible]

135 South 10th St. Philadelphia, May 7.

135 [illegible]

Dear James: Your favor of yesterday is at hand today and give you also an answer to your favor of the [illegible] which [illegible] although [illegible], which came to hand [illegible] [illegible]

[illegible]

McKinley [illegible] dues before yesterday [illegible]

and [illegible]

[illegible]

built the [illegible]

self [illegible]

being combined with his [illegible]

[illegible] I am very glad to learn [illegible] matters about [illegible] and from [illegible]

[illegible]

[illegible] making a very [illegible]

[illegible]

[illegible] where I [illegible]

[illegible]

[illegible]

135 [illegible]

Dear Mary:

Many thanks for your interesting [illegible] March & June, as well as for the [illegible] which I [illegible] that reached me on my arrival [illegible]. I was not altogether surprised on my arrival at S. Francisco to find that you had already sailed for Germany, although when I left [illegible] I hardly thought it likely that [illegible] would [illegible] so soon. — You ask for the benefit of my experience in the Harz; but I fear that I have [illegible] in that way. I walked through the Harz from East to West starting from [illegible] and Thale and [illegible] on my way to [illegible] From Brocken to the Brocken my [illegible] were [illegible] by rain. [illegible] Berlin [illegible] who were travelling through the mountains in a carriage with [illegible] and mother and an old bachelor friend of her father. That [illegible] is a very convenient way of travelling especially if you could bring the [illegible] out somewhere near the place where [illegible] the mountains; but perhaps that may be of less great convenience as the driver [illegible] find another party to take with him on his return. From [illegible] I [illegible] across to the [illegible] and without succeeding in [illegible] the [illegible] there descended to the valley [illegible] both [illegible] were two youngish [illegible] to me to be very likely Americans, but with [illegible] I thought it [illegible] to make myself [illegible] with them. [illegible] young German [illegible] [illegible] of the Englishwomen as they [illegible], and [illegible] [illegible] well although [illegible] [illegible] of German and listened with attention and [illegible] After dinner I went up to [illegible] and then walked on [illegible] whose name I forget, but did not [illegible]. On my way I passed a big park and saw [illegible] the distance. The next morning pretty early (Sunday) I arrived at [illegible] and found my [illegible] [illegible] of the [illegible] and [illegible] [illegible] and [illegible] somewhat [illegible] [illegible] when I dined. In the

afternoon I dressed up the Brocken [illegible] after [illegible] being five o'clock and found the Berlin [illegible] walking [illegible] upward as I approached from the top of the tower and [illegible] the heights of me. One of them was looking at me through a [illegible] just as I had looked at the [illegible] on her first coming to the top of [illegible] looking but had the best sight. It was too cold for me to go up the tower [illegible] after and I waited in the hotel for a few minutes before [illegible] and drank some [illegible] lemonade. On going out [illegible] to [illegible] the [illegible] I found my new friends coming in and [illegible] the [illegible] clouds dark and concealed the view. I had a pleasant [illegible] evening talking with the Berlin folks, and they went home the next morning. I [illegible] waiting [illegible] in hopes of getting a view, but finally had to content myself with [illegible] glimpses of it in the morning. I found the [illegible] at Oker and the mines at Clausthal, as [illegible] so much for [illegible] experience in the Harz (hearts of [illegible] will [illegible] many after all [illegible] to you in one way or another. — I am delighted to hear that you are getting along so well up there [illegible] I am pleased that it has come about in some way that you [illegible] the king longer walks than you could ever have been induced to take at home; it will be an admirable thing for your health. [illegible] that even sea sickness will be much less likely to trouble you on your return home if you have previously [illegible] sailing [illegible] habit of walking a good deal on land; it will be [illegible] comparatively easy to keep up the habit on board ship. Besides, if you keep up the habit from this time until your return you will come back quite robust no doubt. I became last summer at [illegible] more than ever in love with walking as a mode of exercise for one who has to work with the head. The motion of the legs seems to draw [illegible] the blood from the head and to give it more relief and rest than even lying down and sleeping for the same length of time. This relief and rest needs to be prolonged for a certain time and walking is therefore better than some more violent exercise that tires [illegible] — I went last [illegible] to a beergarden concert here better than [illegible] they have had until this summer [illegible] was quite [illegible] carried back to Germany and [illegible] of that [illegible] now and then. [illegible] like very much to pay you a visit some day in Berlin [illegible] and even sometimes dream of doing so. [illegible]

becoming a great inventor, and it has occurred to me that it may
be worth while for me to go to Europe to patent one or two of my
numerous inventions. If I could ever find time enough to write
that projected book on Surveying it would pay. I ought to have made
[illegible] the wood cuts [illegible] [illegible] but I [illegible] [illegible] got so far
by [illegible]. ~~[illegible]~~ I have already applied for two [illegible]
surveying instruments [illegible] [illegible] [illegible] instrument makers think highly of
and I intend to apply for three more before long — [illegible]
[illegible] have very [illegible] with Mrs. Palmer [illegible] [illegible]. She [illegible] [illegible]
after you and was astounded at the information of your [illegible]
going to Europe. She was as charming as ever and [illegible] [illegible]
account of [illegible] [illegible] and [illegible] of her [illegible]
my [illegible]. Mr. [illegible] [illegible] died about a year ago; you know
he had suffered from paralysis for nearly a year [illegible]. The
family live in the same house as when you were here. Miss Lucy
Jackson is engaged to be married; Frank [illegible] is married (after
[illegible] [illegible] [illegible] [illegible] [illegible]) [illegible] at that party you [illegible]
[illegible] the [illegible] and [illegible] had just [illegible] was [illegible] to marry [illegible]
although the [illegible] [illegible] [illegible] [illegible] [illegible] to be a surprise to [illegible]
~~[illegible]~~
relatives and intimate friends; [illegible] [illegible] [illegible] engaged a year
and a half ago, but became disengaged [illegible] [illegible] afterwards. Her
mother is a hopeless invalid. Mrs. [illegible] wife (Bel [illegible]) had her
second child, a second daughter, a [illegible] ago. The [illegible] are
all well. [illegible] [illegible] [illegible] of [illegible] [illegible] [illegible] could be made
to like study and has gone into [illegible] [illegible] [illegible] and is bound
on becoming a commission merchant eventually. It seems [illegible]
[illegible] that the idle wishes of a young boy [illegible] [illegible] [illegible] [illegible]
in spite of the regrets he will [illegible] [illegible] [illegible] when he is a [illegible]
older and finds it too late to change. I [illegible] to Mrs. Palmer that [illegible]
[illegible] one of the boys who [illegible] like postage stamps [illegible] a [illegible]
them [illegible] [illegible]. [illegible] [illegible] [illegible] [illegible] [illegible] must be a [illegible]
[illegible] [illegible] in the [illegible] family! — [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] Mrs. [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] and [illegible]
[illegible] [illegible] German Club a couple of years ago. I had the [illegible]
talking [illegible] [illegible] and [illegible] at her house once [illegible]
and found [illegible] [illegible] [illegible] and [illegible] [illegible] [illegible]
[illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]
[illegible] and [illegible] [illegible] [illegible] [illegible] [illegible]. Miss [illegible]

[illegible] Street, Philadelphia, [illegible]

Madame [illegible],
Berlin.

My dear Madame,

The bearer of this is my youngest child [illegible] who is already in Germany and is [illegible] to spend the coming winter at Berlin. Remembering the kindness of your reception [illegible] German [illegible] Caroline [illegible] a couple of years ago, I take the liberty of [illegible] in this way with [illegible], and [illegible] feel sure that she will [illegible] your friendship most highly. [illegible] you will find her [illegible] [illegible] of any [illegible] affection [illegible]. [illegible] as many friends and [illegible] of American friends [illegible].

I remain, My dear Madame,
Very truly yours
[illegible]

[illegible]

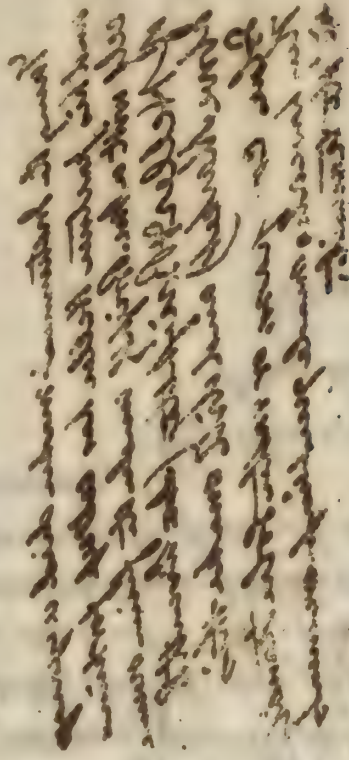
22 July [illegible]

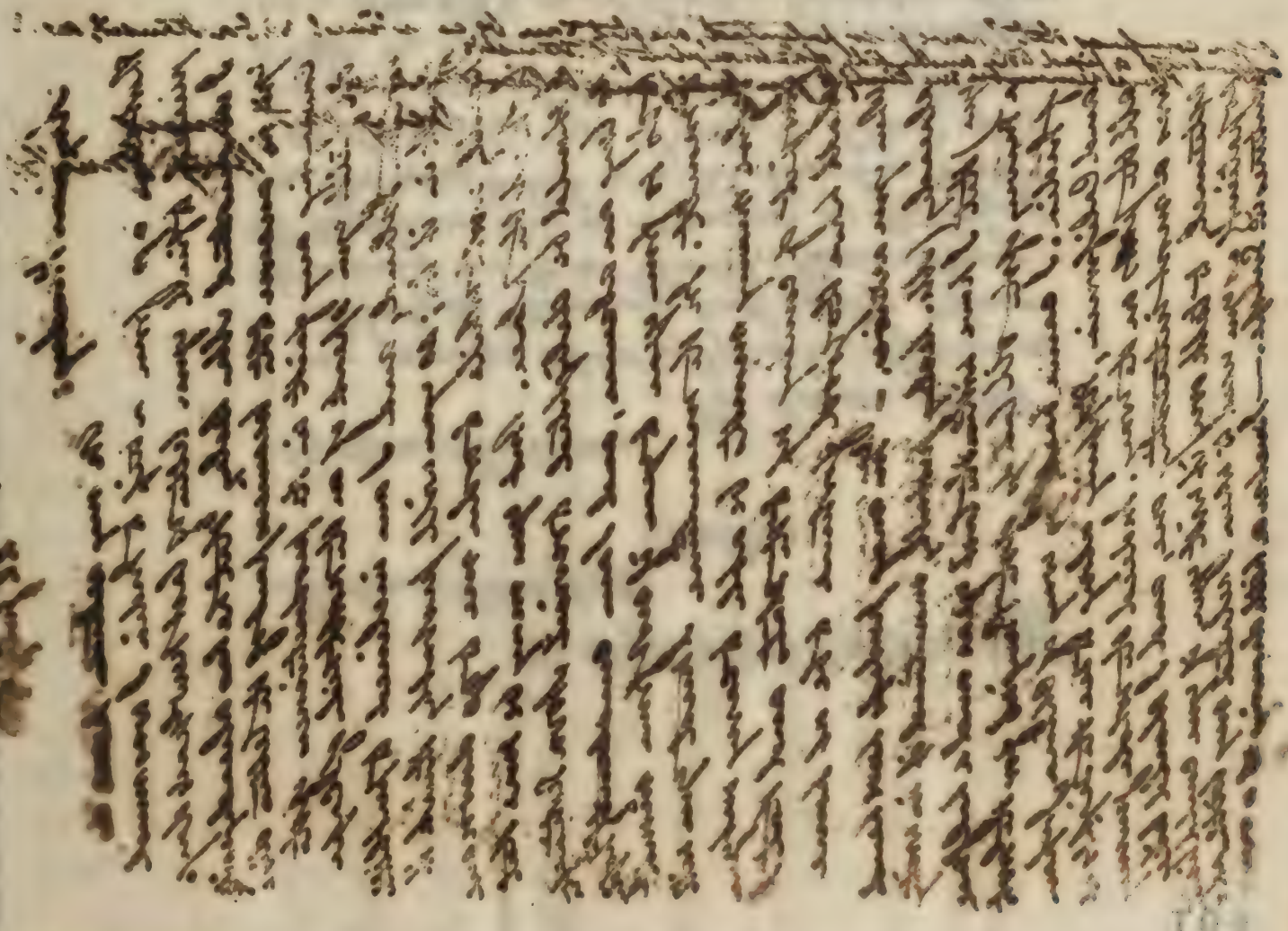
[illegible]:

On my return home [illegible] this [illegible] ago from a trip to India I was much pleased to find your letter of last New Year's day. I understand Mr. Daly that he has already written you in answer the business part of the letter. As concerning any faith in the productiveness of the [illegible] you speak of on the north side of Cape Island, and I am inclined to [illegible] in it [illegible]; so you will probably think it hardly worth while to order me to go down on the [illegible] place. But you may be sure that I should be delighted to revisit Nova Scotia after so long an absence, and I am constantly hoping to do so from year to year if not from month to month. In the meantime I trust you will before many months be able to carry out your project of coming up to the States and that I shall have the good fortune to be at home when you arrive. — You may perhaps have heard already (Mr. Daly probably mentioned it in writing you) that I have within the last year made a half [illegible] a journey of the old land by [illegible] [illegible] for the north of India. I came back by way of China, Japan and California, stopping along to see the sights at all the ports on the way. Indeed the whole journey was a most interesting one, and I should like extremely to talk over it with you if you could be as patient as you used to when I related my little adventures in Europe. — I made a little drawing of a [illegible]

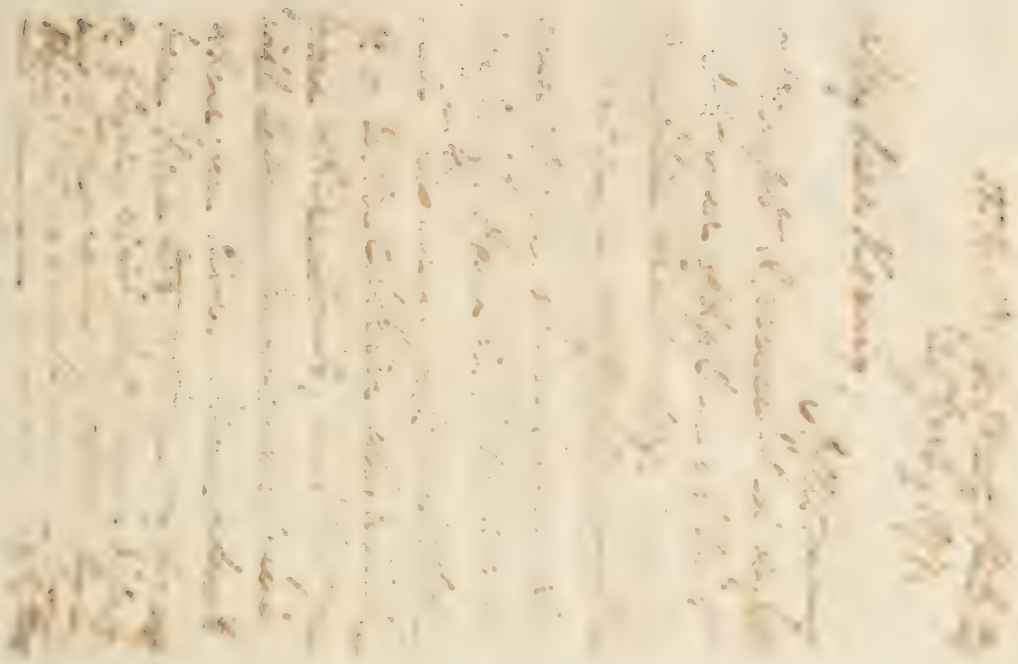
[illegible]

Young the Dutchman's [illegible] made [illegible] a young [illegible] and his partner Heller has [illegible] [illegible] cell with a Mr. Briffley under the firm name of Heller & Briffley (the [illegible] Grove Market) and still make things [illegible] go [illegible] or rather [illegible] [illegible] [illegible] made [illegible] [illegible] the [illegible].





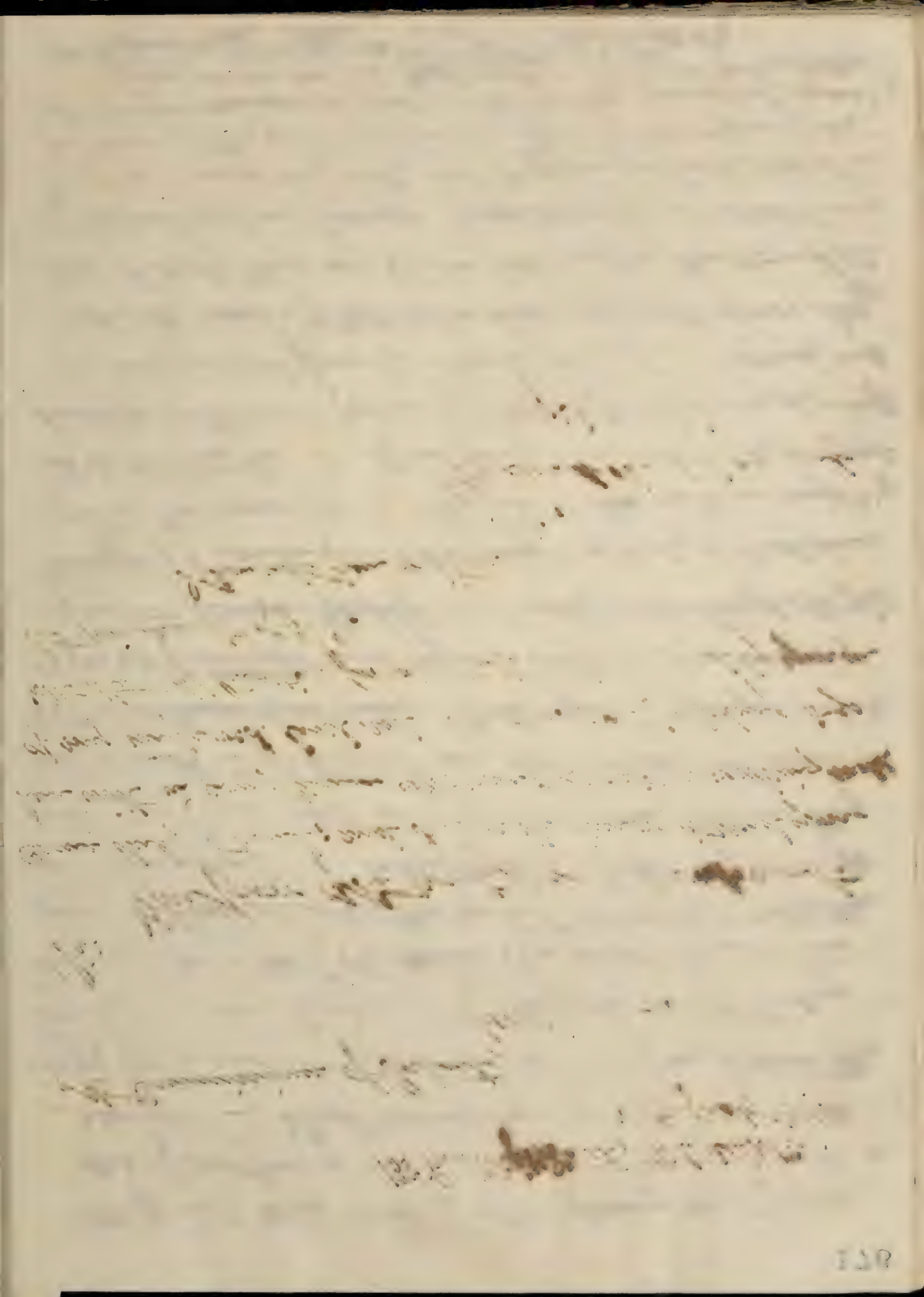
E. H. Robinson Esq.



[illegible]

13 [illegible], Tuesday
31 July, [illegible]

Dear Higgy:
I was glad to learn by yours of [illegible] yesterday
[illegible] health was improving [illegible]
Care; [illegible] surprised to see that [illegible] had been confined
to her room, as something you [illegible]. I was
very glad to learn the particulars [illegible]
[illegible], and perceive that you [illegible] better
acquainted with [illegible] and
remarkable [illegible] in the [illegible]
shock me by your [illegible] of faith [illegible] extremely
inventions that your humble correspondent is bringing
before the world. Perhaps it is useless to argue the matter
with so incredulous a body, better perhaps to wait
until in the course [illegible] the welcome [illegible]
[illegible], but it is perhaps also proper
to state that so [illegible] and [illegible] as
the instrument maker [illegible]
given in my former letter [illegible]:
and that he is determined [illegible], that he [illegible]
[illegible] a manufactory [illegible] instruments
and so on and so on! [illegible] richness, indeed.
Perhaps you begin to think that the instrument maker [illegible]
self is as [illegible] as if he [illegible]



135 R [illegible]

My dear [illegible]

Your [illegible] of [illegible] February only came [illegible] [illegible] [illegible] Calcutta [illegible] [illegible] [illegible] very [illegible] [illegible] [illegible] [illegible] [illegible]. They [illegible] after [illegible] [illegible] [illegible] [illegible] [illegible] all [illegible] [illegible] [illegible] [illegible] [illegible] by [illegible] [illegible] [illegible] [illegible] perhaps [illegible] from [illegible] [illegible] [illegible] [illegible]. They were all very much pleased to hear about you both, and [illegible] to see them again [illegible] [illegible] about you and [illegible] your [illegible]. I mean [illegible] [illegible] of [illegible] [illegible] [illegible] here for a similar purpose, although you [illegible] [illegible]. Your [illegible] [illegible] his [illegible], but it was not [illegible] written down, it has slipped out of [illegible]. [illegible] to say you would like to see anything about the Punjab oil. I [illegible] [illegible] at Calcutta to have a [illegible]

[illegible]

My dear Wynne:

[illegible]

[illegible]

R. W. Raymond Esq.

[illegible]

[illegible]

I should [illegible] of [illegible] in [illegible]
have [illegible] might be added [illegible]. I [illegible] of
any new [illegible] might be added [illegible]
would put a copy of Sacontala [illegible]
the [illegible]. Please have the [illegible]
be [illegible] in water proof paper or [illegible]
a wooden box as small as may be and bound with [illegible]
at each end as [illegible]. Let the box be marked:
"B. S. Lyman, Care of Messrs. A. A. Low & Bros., Burling Slip, New
York;" and let it be sent by [illegible] of the steamer [illegible]
[illegible] England [illegible]
England [illegible]
[illegible] vessels sailing [illegible]
[illegible]. I will ask my good friend [illegible]
[illegible], to tell you about [illegible]
[illegible] the box by steamer or by sailing vessel. You can [illegible]
with him [illegible], but I beg you [illegible] in such a way as [illegible]
him [illegible]. I have already [illegible] him [illegible]

3

trouble in attending to my affairs; but he is very good-natured. Please show him the box before sending it. Inside the box should be put an invoice or list of the contents [illegible] box with a statement of their cost, so that the [illegible] duties can be collected after [illegible] in [illegible]. The statement should be [illegible] correct [illegible] by [illegible] consul in Calcutta. The [illegible] in a [illegible] sheet [illegible] [illegible]. Please send one copy of the invoice by mail to my [illegible] in Philadelphia, and [illegible] [illegible] money [illegible] in your hands. If you find it quite impossible to get [illegible] [illegible] [illegible] them [illegible], instead [illegible] [illegible] [illegible]. On second thoughts I think I will send the bill of exchange to Mr. [illegible] and he will be able to get it cashed [illegible] money more easily than you can and will hand the money over to you after taking from it any small sum that I may be owing to him.

The Brahmadarsi [illegible] newspaper (by [illegible]) has never come to hand, as I suppose you had some difficulty about it or its postage. No letter from you has come to hand either, and I should be very glad to know how you and your [illegible] are getting on, [illegible] trust you are [illegible] doing well. My journey here through China and Japan and California was a most interesting one. I stopped at many ports on the way, Penang, Singapore, Hongkong, Macao, Canton, [illegible], Foochow, Shanghai, Nagasaki, [illegible], Osaka, [illegible], Kobe and San Francisco, and saw a great many sights that were all strange to me. Since my [illegible] here I have been travelling about a good deal, partly on business and partly to see my parents and relations and friends [illegible] not seen for a long time, [illegible] I have not been long in quiet. But now I am enjoying a rest from the [illegible] turmoil. I often think with pleasure of the lessons you gave me in Calcutta and of our talks and walks together. Please remember me [illegible] kindly to your [illegible], and give my regards to [illegible] and if [illegible] [illegible] to [illegible] Babu's books that [illegible] me [illegible] interest on the voyage. I almost [illegible]

Northampton, Massachusetts, 16 Aug. 18[illegible]

Pandit Premchandra Chaudhuri
Asiatic Society's Library,
Calcutta.

My dear Babu:

On going [illegible] to-day [illegible] [illegible] [illegible] after writing the letter, I [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] and [illegible] [illegible] [illegible] [illegible]. You will [illegible] [illegible] and get the money from him and [illegible] [illegible] [illegible] [illegible] requested in last week's letter [illegible].

I was greatly delighted to get [illegible] a fortnight [illegible] twenty fourth of June, three days after writing my last to you [illegible], and was extremely interested in the [illegible] in your account of all the trouble you had been [illegible]; for [illegible] [illegible] the [illegible] and books and [illegible] in your account of [illegible] and of your daughter. [illegible] [illegible] your letter [illegible] [illegible] [illegible] [illegible] that I had [illegible] [illegible] your daughter [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] by your [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] a young woman eager to learn. The [illegible] perhaps in [illegible] [illegible] [illegible] [illegible] [illegible] would [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. The [illegible] of [illegible] so delightful a life [illegible] [illegible] [illegible] [illegible] in spite of my being [illegible] [illegible] [illegible] [illegible] and I [illegible] [illegible] [illegible] [illegible] from my country, relatives and friends for a time, and [illegible] for a while [illegible] my business and professional [illegible] in order to carry out so pleasing a project. But at present it is quite impossible to do so; it may become possible in the course of time, [illegible], yet I fear greatly that it can hardly happen.

[illegible] the [illegible]

Northampton, 29 Aug. 1871.

Mrs. Susan I. Lesley, [illegible]

My dear Aunt,

You will be interested in hearing more of the details I learned at Jamaica Plain. On my arriving there Wednesday morning early Mr. James Howe who had been there constantly since the Saturday before and daily for some days before that gave me some particulars of Uncle Joseph's last attack of illness. Mr. Howe had only by chance discovered the state of things in driving over [illegible] Street Hill for the first time in many weeks; but he came daily after that and was of great service as doubtless the family. Uncle Edward was sent for and came last week Wednesday; but Uncle Joseph did not seem to know him, nor indeed to know any member of the family after that except perhaps for a moment. Mr. H. got a good man nurse who was very useful and the [illegible] without Uncle Joseph [illegible] to take some slight nourishment more carefully than [illegible] a spoonful or two a glass of milk [illegible] Dr. Thaxter (?) Dr. Cotting [illegible] mission telling [illegible] his assistant Dr. [illegible] could [illegible] as well as himself [illegible] that seemed [illegible]. On Saturday Dr. Hooper came [illegible] had been [illegible] and he said that Uncle Joseph could hardly live forty-eight hours and it turned out about forty hours. Friday night Uncle Joseph had a violent attack and all the family were [illegible] up, but he [illegible] before morning. The next night [illegible] the same time, [illegible] had [illegible] which was [illegible] indeed; but another [illegible] Sunday night [illegible] in death about five o'clock in the morning. At the last there [illegible] spasmodic contraction of the muscles and movements of the [illegible] but apparently unconscious [illegible] of pain. From early Sunday [illegible] no apparent [illegible] though the breathing continued [illegible] no [illegible]. He had been unconscious [illegible]

3 E96

3

Northampton; 19 Aug. 1878

Miss Anna R. Lyman,
Jamaica Plain.

My dear Aunt:

I find Mother's health such that I will go down to Boston Monday afternoon in time to reach your house by six o'clock if I have good luck about the connections in Boston. The doctor thinks there is no cause for anxiety about Mother, that her illness is merely troublesome and that he has complete control of it. Night before last she had a bad night and was uncomfortable all day yesterday, but she had a much better night last night and is better today. She is still confined to her bed for the most part and her throat troubles her ... .

I was myself under the weather all day yesterday from a bad attack of summer complaint, but I am glad to have got pretty much over it.

Hoping that you and all the family are doing well and that you will give my love to them, I remain, as ever

Your affectionate nephew,

Benj. Smith Lyman.

Northampton, Mass; 2 May 71

To the Commissioner of Patents,

Washington, D. C.

Sir:

I have to know of acknowledging the due receipt of yours from the Patent Office of this month covering a communication from Examiner Loom No. 1, rejecting my application for a patent on improvements in Level Rods and Stadias filed 2 May 1871; and take the liberty of returning herewith a renewal of my application together with a rebut and amendment of the claims of the original specification claiming their meaning more clearly. As the Examiner appears to have wholly misapprehended the main points of the claims, I beg leave to argue here the reasonableness of my application.

It is very true that the use of different colors for different orders of units is common on Tape measures and Level rods; but I insist that it is quite new to mark a higher order of units on Level Rods or Stadias by a different colored ground (extending over say a third of a foot) as well as figures, and

this is the main feature of this part of the invention. At evening, for example, the figures very [illegible] and at a distance, where it often becomes impossible to distinguish the ordinary red foot numbers from the black inch numbers.

"It is also true that the use of figures made with blocks and square angles is common in ladies' embroidery," but these blocks and angles have never before been made (especially on level rods and staffs) with precise reference to measures of length with which they are combined and which they supplement.

Of course "the applicant is fully aware that the system of marking levelling staffs by coloured divisions is in general use;" but such divisions have hitherto always been separate from the figures that mark the main divisions of the rod, and have therefore made a greater width of rod necessary and have been confusing to count in comparison with my arrangement.

But my claims are for the novel use of certain arrangements of figures and colors upon level rods and staffs rather than for the abstract "novelty" of these arrangements.

will [illegible] the rod and with the [illegible] and it seems to be a suitable object for patent as it comes clearly under the head of a "new and useful art, machine, manufacture or composition of matter." Even if the rod were only a "manufacture," it one might properly be considered "a new and useful art" or a "new and useful improvement" of the art of knotting or of measuring distances with a chain, or the invention might be considered an improvement of the art of making knot rods and chains.

It seems quite impossible to secure the invention by a copyright (as suggested by the Examiner), because it cannot be made to come under the head of a "book, map, chart, dramatic or musical composition, engraving, cut, print, or photograph or negative thereof, or of a painting, drawing, chromo, statuary, and of models or designs intended to be perfected as works of the fine arts," which the law of July 8, 1870, makes subject to copyrighting. Even if it were enough to copyright a printed copy of the marks it would be necessary to make them in such a copy of an infinite variety of forms in order fully to cover the invention. [illegible]

[illegible] and not to the [illegible] shape given in the drawing and model, although it is believed to be the best; but the forms may be varied indefinitely, only always made upon a certain principle. However unusual they may be [illegible] of each tab.

It would, therefore, seem to be impossible to carry the invention by patenting the tables as a design. The tables covered by the invention do not indeed form merely one design, but an infinite series of designs, all formed however upon one principle.

It is, therefore, clear that such tables as are described in the specification are quite new as well as useful, and as such are entitled to the privilege of protection granted by the laws. They come under the scope neither of the laws for copyrights nor of those for patenting designs; but manifestly belong under the laws for the patents of invention.

I have the honor to be,

Sir,

Your most obedient servant.

Address: [illegible], Philadelphia; Benj. Smith Lyman.

Jamaica Plain, Mass., 22 August.
(Address: No. [illegible] [illegible])

Professor E. Desor, Neuchâtel.

My dear Sir:

Mrs. Joseph Lyman desires me to give you the sad news of the death of her husband (my uncle) at his home here on the fourteenth of this month, just three days before he would have become fifty nine years old.

You already know well the intelligence of his mind, his amiable character, his high culture and his gentle manners; but you are perhaps quite unaware of the heroic patience with which he endured for forty years the suffering, often excruciating, brought on by a most serious accident that he met with in being thrown from a carriage while he was a law student at Cambridge. Up to that time singularly handsome, spirited, intelligent, ambitious and of the highest promise every way, he had especially won the admiration of all who knew him. He was at first confined to a hospital for about a year, and ever since has enjoyed something like health only for short intervals. At such times his spirits and feelings were but too apt to lead him into some imprudence which brought back inflammation that prostrated him for a long time. For some years past he has spent the greater part of his time in bed, where he was more comfortable than elsewhere; and at length during the last three years his mind also seemed to suffer from the disease of his body. He began to lose his memory and judgment and in a measure lost all spirit about making efforts to retain his general health by exercise in the open air. But only six weeks before his death he took again to driving daily and greatly raising the hopes of his family by his seeming improvement. But this was followed by an ill turn more serious than ever, which in about ten days ended fatally after many two days of apparent unconsciousness and several days more of almost total abstinence from food and inability to recognize even members of the family.

Knowing of your former regular correspondence with him I have thought you would be interested in these details. If you have missed his letters of late it is owing to the progress of his disease. A member of his family at his request when he was too sick to write answered some eight months ago the last letter that the family knew of his receiving from you.

I remain, my dear Sir, Very truly yours. [illegible]

Jamaica Plain; 22d Aug. '71.

My dear Sanborn

I came on here last week to the funeral of my uncle Joseph and went up to Northampton on Thursday evening. Friday I was laid up with an attack of summer complaint that passed off for the most part on Saturday. I thought it very likely that you were spending Sunday at Concord or elsewhere away from Springfield or I should have tried to see you on Monday (yesterday) by laying over a train at Springfield, starting from Northampton earlier on purpose. But I hope to see you within a few days, for I shall go up to Northampton again to be present at the great Lyman meeting on the thirtieth. Shall you perhaps be at Concord next Sunday? If so perhaps I can go up there to and stay at the hotel there and afterwards accompany you as far as Springfield on my way to Northampton. I shall probably stay here until about the end of the week. Even if you and your family should not be at Concord I should be very glad to see a little more of the place, and might stop there if it did not prevent me from seeing you elsewhere.

I have almost daily been planning to write you a letter ever since I was here, but as your newspaper man say, "it has been crowded out" by other things. Hoping, knowing that you have all been well and are still so, I remain, ever

Yours very affectionately. Benj. Smith Lyman

Jamaica Plain; 2d Aug. 1871.

Dear James:

I arrived here safely last evening only by 8 o'c. an hour later than I had hoped, but in a little puddling, & found the family expecting me with dinner waiting and was apparently glad to see me. Ever and her children and nurses are not here as so large an addition to the family would be tiresome to Aunt Lucinda; but they come every day to see her and she looks forward with pleasure to the daily visit and enjoys it much. She seems still very cheerful and quiet and I am told she looks even better than last week. Miss Clap looks better too, and Nelly quite as well. I am installed in the big room of the third story and am already a regular member of the family &c. Aunt Susan sat with us at the dinner table last evening and sat up afterwards in the parlor until 9 o'clock, an hour later than usual, and seemed to enjoy very much hearing me read extracts from my long Indian letter. She had a good night and seems refreshed this morning. Day before yesterday she was made nervous and uncomfortable by receiving a half hour's call from some relatives, and on my arrival yesterday was in the act of avoiding another like visit of her nieces by staying up stairs. Although attached to her relatives, the discussion of Uncle Joseph's last illness is too exciting for her.

Please give my love to all.   Your affectionate Brother. Benj. Smith.

Jamaica Plain; 23 Aug. 1871.

Dear James:

I was in Boston yesterday morning and inquired of the Insurance Commissioner at the State House whether his report had come out yet. He answered "No; not a word of it has been [illegible] yet. It will not come out until the first of October at [illegible] [illegible]." I am afraid I may have forgotten precisely what you wished me to do, but on receiving this answer thought it was time to [illegible] on my part to letting my enquiry [illegible] about the probability of your paper, and to come away without even telling of my being [illegible] you or being connected with your [illegible]. But if you wish me to make any further inquiries of him, it will give me pleasure to do so, and you can drop me a line here to that effect.

On inquiring about Miss Twombly [illegible] [illegible] that she had gone away without being able to find [illegible] [illegible]. Miss Clapp says she will keep [illegible] [illegible] [illegible] which Cousin Annie Hendee brought [illegible] [illegible] and [illegible] Aunt made for the missing one when Mrs. Twombly [illegible] and will keep me with the other for you. Miss Clapp will [illegible] you by [illegible] a [illegible] in [illegible] of [illegible] [illegible] Twombly, but now there!

Aunt Susan put in my hands this morning a nice [illegible] for Father, one that was Uncle Joseph's, also a black suit of clothes [illegible] for Father too; likewise one or two coats and pairs of trousers for either of you or me as we may decide amongst us. They are all little worn and she is anxious to have them made use of by one of us, who would at the same time value them as a souvenir of Uncle Joseph. I shall write Henry to Northampton.

Aunt Susan has borne it about as well as usual, but got rather tired this morning and nervous, [illegible] for a short time, and at breakfast took her old place on the sofa instead of at table, as usual.

Hoping that you are all doing well, and [illegible] disappointed about not getting any letter from you this morning, I remain

Your affectionate Brother Benj[illegible]

[illegible] Jamaica Plain, Mass., 23 Aug. 17[illegible].

My [illegible]:

I shall be going to Philadelphia [illegible] from [illegible], and if you [illegible] [illegible] should be glad [illegible] you. [illegible] was in Philadelphia [illegible] part of July [illegible] [illegible] up and passed almost daily by your house, which gave me not only the opportunity of [illegible] in a [illegible] way that you were not at home, but also a chance to see that the house was still safe and apparently untouched by burglars. Indeed, the [illegible] [illegible] full of [illegible] [illegible] is in a measure a guarantee of safety to your house; and [illegible] [illegible] the [illegible] sort of [illegible] connected with the house [illegible] [illegible] (Mr. [illegible] for I saw a man [illegible] his [illegible] one evening and the shutters of the parlor open [illegible], [illegible] that [illegible] seems to be doubted. The [illegible] in Philadelphia [illegible] not been so [illegible] this summer, but that you would have been perfectly comfortable at home. As you [illegible] [illegible] on account of the summer's heat and more for a [illegible] love of change and novelty — it is a pity that the [illegible] [illegible] season could not have been [illegible]! I trust that in your [illegible] [illegible] place you have not been [illegible] [illegible] that you are [illegible] [illegible] the [illegible] [illegible] health. [illegible] that you will [illegible] before we meet in Philadelphia [illegible] [illegible] your [illegible] [illegible] you may [illegible] [illegible] [illegible] [illegible] any [illegible] or [illegible] [illegible], [illegible] of the [illegible] [illegible] have been [illegible] [illegible] [illegible] in Philadelphia for you and Miss Charlotte to [illegible] [illegible] [illegible]. — [illegible] [illegible] [illegible] [illegible] [illegible] and [illegible] [illegible] and [illegible] that have been [illegible] [illegible], and [illegible] in [illegible]. [illegible], [illegible]

Your affectionate friend [illegible]

Jamaica Plain; 29 Aug. 1871.

My dear Sanborn:

I would write you to Concord the 5th Sept., even if you wish to return home; though I should like very much to find out your plans. Still if you should not have time to write me again [illegible] the shipping news, I will make a guess of your plans at the [illegible] [illegible] before [illegible] on Saturday afternoon, as I believe the [illegible] Club dines at [illegible] and would be very happy to dine among them with you, and have a glimpse of the [illegible], intellectual and gastronomic delights of that [illegible] circle.

I'm hoping of seeing you at any rate the day after tomorrow. I remain

Very affectionately yours.

Benj. Smith Lyman.

[illegible]

Jamaica Plain; 25 Aug. 1871.

Dear James:

I was very glad to learn yesterday by your favor of the day before that Mother's health had improved so much, and I trust it has continued to do so. — Aunt Susan seems to be doing well, although day before yesterday [she] was in much the same state as last winter, extremely nervous; [yester]day she seemed better and today still better. She sat at table at luncheon time, instead of on the sofa or the bed [illegible] for a number of days.

I am going up to Concord tomorrow and probably to spend Sunday with Sanborn; and shall go from there to Northampton, perhaps on Monday. I think I shall send the small [illegible] to Father and you and me [illegible] Aunt Susan by express [illegible] so as to have it out of the way.

If I did not get from the Insurance Commissioner [illegible] all the information you want pray write me and I will call on him again. I shall very likely come down to Boston from Concord; so you need not be afraid of giving me trouble about it. My only reason for not asking him whether [illegible] were going to publish [illegible] article, [illegible] my own responsibility in my [illegible] was [illegible] fear of making him think that you were more anxious about the matter than perhaps you would like to have [illegible].

I was glad to hear from the family here today that Mrs. Brewer is going to come here for a visit next Wednesday. I think she is one of the few whose visits would not only be enjoyed by [illegible] in her present state but whose presence would be beneficial.

Please address me at Concord, care of F. B. Sanborn [illegible] my love to all, and believe me always,

Your affectionate Brother

Benj. Smith [illegible]

Concord, Ms.; 27 Aug. 1871.

Mrs. Susan B. Lyman,
Jamaica Plain.

My dear Aunt:

I forgot after all at the last minute yesterday to write down the place of manufacture of that plate as you requested, although I had laid out a card expressly to write it on. It is Goojerat, a considerable town not far from Lahore in the Punjab; the plate is made of steel inlaid with gold, & the work is called "Goojerat inlaid work." — I dined at the Bird Club with Mr. Sanborn yesterday, and luckily enough General Butler sat opposite to us. He I should presume put such constraint upon the company as rather to spoil the dinner. — The first Concord news I heard was the engagement of Edward Emerson to Annie Keyes, the [illegible] it came out. Everybody is surprised, including Annie herself it is said. They cannot be likely to be married soon; for Edward is going to Europe for a couple of years before marrying, and he sails within a week or two. She is a very nice girl and he a fine young man. — If any letters come for me to Jamaica Plain please have them forwarded with the other letters; for I go up [illegible].

I [illegible] give my love to Clap, Nelly and Everyone; believe me always

Your affectionate nephew,

Benj. [illegible]

I forgot [illegible] Clap [illegible]
[illegible]
[illegible]

Concord, Mass: 27 Aug. 1871.

Dear James:

I was very glad to hear yesterday by your [illegible] of your [illegible] [illegible] came here yesterday by [illegible] of the other, when I met Sanborn and dined with him at the Bird Club with General Butler [illegible] [illegible] two [illegible]. His presence did not add to the pleasure of the dinner by any means. I [illegible] from Boston [illegible] by [illegible] one of [illegible], and the [illegible] of [illegible]. [illegible] the bank [illegible] [illegible] and will not be opened until your arrival. — The chief news I hear at Concord is the engagement of Edward Emerson to Annie Keyes [illegible] here [illegible] of [illegible] and both very nice young folks. He is just about to sail for Europe for a couple of years [illegible] I suppose, and they are not to be married [illegible].

— I left Aunt [illegible] very well, and looking [illegible] and in better spirits than [illegible] a long time than been [illegible] of late.

Please give my love to all. [illegible]
[illegible] until my arrival. [illegible]
[illegible]

Northampton, Ms.: 29th Aug. 18[illegible]

Mrs. Susan B. Lyman,
Jamaica Plain.

My dear Aunt:

Father and James wish me to thank you very much for the gift of the clothes that you so kindly sent to them. The garments will not only be precious as keepsakes but very useful possessions.

I am sorry to find Aunt is not very much better than when I left her. The dyspeptic trouble continues and very much exhausts her besides keeping her awake of[ten] back at night. Last night, however, she had a very [good] night and she sat up a little while this morning, as she does every day.

That plate was made after all at Sealkote (pronounce See-al-kote) instead of Ferozpur, as I now remember; the two places are near together and this kind of work is done at both.

I arrived here safely last evening by way of Conc[ord] and Boston. There are no signs yet of the momentous Lyman gathering of tomorrow, and I find the family seem to look upon it with great contempt in spite of bringing some wanderer here from a distance.

Please give my love to all and believe me ever
Your affectionate Brother [illegible] E. J.

Mr. Thomas Ellis, Esq.

Mr. Thos. H. Ellis, Jamaica Plain.

My dear Friend:

[illegible]

Northampton, 31 Aug. 1871.

Miss Susan B. Lyman, [illegible] Maine.

My dear Aunt:

I send you herewith the Springf'd Republican of yesterday with a notice in it of Uncle Joseph [illegible] by Mr. [illegible]. He said the other day that he [illegible] have written [illegible] the time of [illegible] if he had not [illegible] in consequence of travelling to learn of those and until [illegible] days had passed. If I had thought of this making the Lyman gathering the occasion of such a notice I'd have thrown out [illegible] that might have been [illegible]. [illegible] the piece seems to be very satisfactory, and is [illegible] meant in every [illegible] to be [illegible].

The Lyman gathering yesterday at Mount Tom [illegible] to have very bad luck as to weather. About eleven o'clock in the midst of the speeches it began to rain hard and the picnic was wholly broken up and as there was no shelter in the woods very many were soaked with rain. The meeting [illegible] adjourned to Springfield City hall, and many [illegible] came to Northampton instead [illegible] to Springfield this morning, and [illegible]

[illegible] very good night last night and feels better [illegible] [illegible] very [illegible] in the [illegible] for [illegible]
[illegible]

[illegible], 1 Sept. 1871.

My dear Miss C[illegible]:

I am glad to learn this morning by [illegible] day before yesterday that you are all doing well. [illegible] James (whom I have not seen since you[illegible] came) to send [illegible] [illegible] his [illegible] of [illegible] [illegible] going it. Please tell [illegible] that the express on that [illegible] was [illegible] together with that on some other things of [illegible] [illegible] I [illegible] at the same time [illegible] it is quite [illegible] to say exactly how much it was, but that the whole was such a mere trifle that it need not give her the slightest [illegible]. I did not mean [illegible] she should know of the [illegible] going by express, for fear she might be [illegible] in regard to my bearing the expense. [illegible] the barometer [illegible] [illegible] not [illegible] to trust it to the express, [illegible] it [illegible]. It is customary however to send such barometers by express as they can bear a certain amount of rough handling without harm.

The weather was fair yesterday and I went down to Springfield to see the finishing up of [illegible] [illegible]. About 15 or 20 were there and the [illegible] [illegible] were [illegible] that had been [illegible] by [illegible] day before. [illegible] much speech making [illegible] [illegible]! [illegible] [illegible] [illegible] meeting [illegible] a [illegible] [illegible] [illegible]

[illegible] told me yesterday that Mr. [illegible] of [illegible], a [illegible] man, wanted a [illegible] for [illegible] children, as [illegible] had just informed him. Also that [illegible] [illegible] wanted a teacher for a [illegible] [illegible] young woman. Perhaps [illegible] may know among her [illegible] acquaintance of young [illegible] some one who may be just the one for one of these [illegible].

[illegible] this [illegible] put [illegible] good [illegible] and [illegible] as for two [illegible] nights before, [illegible] the [illegible] [illegible] [illegible] day. [illegible] [illegible] a word [illegible] [illegible].

Dear James:

135 South Fifth Street, Philadelphia;
8 Sept. '7[illegible]

My dear Miss Clapp:

Will you be so kind as to hand the small package containing the book [illegible] [illegible] with my compliments. I trouble you about it because [illegible] [illegible] [illegible] [illegible] registered letter, and [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] to give the [illegible] [illegible] [illegible] [illegible]. The book is [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] and in the [illegible] [illegible] [illegible] [illegible] [illegible] and, I may add, in the [illegible] [illegible] [illegible] [illegible] [illegible] gratitude!

I arrived here only [illegible] [illegible] [illegible] having left [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] morning and [illegible] [illegible] [illegible] [illegible] [illegible] in New York. I [illegible] [illegible] [illegible] [illegible] morning and found her [illegible] [illegible] [illegible] [illegible] [illegible] [illegible] well. Her health has [illegible] [illegible] especially [illegible] [illegible] [illegible] only a [illegible] [illegible] [illegible] [illegible] [illegible] [illegible]. Mr. [illegible] seemed pretty well, [illegible] [illegible] about his newspaper, and also [illegible] his [illegible] [illegible] geological work. — [illegible] [illegible] [illegible] [illegible] [illegible], but apparently improving slowly.

Hoping that you are all well, and that you will give my [illegible] [illegible] all, I am, as ever,

Yours very [illegible]
[illegible] [illegible]

135 South Fifth Street, Philadelphia, [illegible]

To the Commissioner of Patents,
Washington, D. C.

Sir:

I have the honor to acknowledge the receipt of your favor of the [illegible] of last month covering a communication from Examiner's Room [illegible] for the [illegible] [illegible] [illegible] [illegible] [illegible] paid [illegible] and returning herewith an appeal from the decision of the Principal Examiner to the Commissioner [illegible] likewise the fee of ten dollars for such an appeal, in the form of a treasury receipt.

I beg [illegible] again to the argument already filed on the 22d of August, 1876, and to add the following [illegible] answer to the communication of the Principal Examiner.

His words, "even had he devised a different graduation from the usual hundredths of a foot, or an entirely new set of characters," seem to imply [illegible] misapprehension [illegible] last.

First. The divisions of the improved rod are not necessarily tenths and hundredths of a foot, though that is no doubt the most convenient for levelling purposes, since the foot is used as a standard of measure and decimal notation is used in ciphering. The same system of marking is equally applicable, with [illegible] modifications, where any other subdivisions are used, such as sixty fourths, one hundred and [illegible] or one hundred and forty fourths of a foot, still keeping the foot marks the same; or the [illegible] and its subdivisions may be made [illegible] when used on [illegible], for measuring distances, with two or more horizontal [illegible] in the [illegible], may have the larger units (corresponding [illegible]) of any size required by the distance apart of [illegible], and the tenths and hundredths of these units would be marked in the same way as [illegible] and would [illegible] that go with the [illegible], but of course differing from tenths and hundredths of a foot. This very variety of forms, [illegible], makes it impossible to cover the invention by any copyright or patent for a design.

Second. I maintain that the characters proposed by me are entirely new, although [illegible]

Northampton, 14 Sept. 187[illegible]

My dear Sanborn:

Here I am again at Northampton [illegible] before I found time to write you from Philadelphia. I [illegible] at Springfield after dark last night and here this morning and came to see just how matters were going on with [illegible]. She says she is not much better than when I went away [illegible] ago, but seems to be [illegible] comfortable, and especially within two or three days past has improved decidedly in some respects.

I have brought with me this time the notebook that has [illegible] and will [illegible] for you, and [illegible] in Philadelphia [illegible] a day or two. On my way [illegible] I staid two days in New York and looked up [illegible] Astor Library, and afterwards looked at [illegible] collection of [illegible] and the works of [illegible] especially at Monier Williams's Sanskrit text of Sakuntala and his literal translation of the poetical parts of it. It seems [illegible] in the English [illegible] very [illegible] in [illegible] so; [illegible] his free English translation of the whole play [illegible] is [illegible] before [illegible] can be no doubt improved [illegible]. He says [illegible] translation was made from a [illegible] edition or [illegible] Williams's [illegible] the best edition of the original [illegible] [illegible] with you [illegible]

Northampton, Ms.; 16 Sept. 1871.

Mrs. Susan I. Lesley, Philadelphia.

My dear Aunt:

I missed the connection yesterday in [illegible] and so had to stop at Springfield. [illegible] in this morning. Mother said she was not much better than when I left; but in some respects she has decidedly improved within two or three days. The inflammation seems to have left her mouth and throat and to be confined mostly to her stomach. The doctor this afternoon thinks her [illegible] to-day, [illegible] had a poor night, but yesterday was a good day. The doctor & she and Lizzy are convinced that the inflammation [illegible] up this morning for the first time I heard from [illegible] Ruffmann [illegible] and [illegible] opinion that she would [illegible] one, and this story may have [illegible] with your sympathy. Dr. Ruffmann, however, had very slight [illegible] upon this suspicion and would not [illegible] mention it to Lizzy after [illegible] had told him to tell Lizzy everything he had to tell. I should [illegible] that Dr. Ruffmann's suspicion was unmentioned to [illegible]. For my own part I attach more faith in this matter to the doctor's opinion, as he has had so much better chance to observe the symptoms and probably much more experience in such diseases. Mother's throat, however, is rather worse than when I left her, and she talks with a cracked voice, not so weak and feeble as I had expected from James's letters, but pretty strong though cracked. Dr. Ruffmann [illegible] come off every few days, and it is probable that [illegible] will come up this evening [illegible] to stay a week. The hope is to build up the [illegible] that Mother may take enough nourishing food to enable her to make the trip to New York. There it is proposed that she shall board some where near the Fifth Avenue hotel, where Dr. Ruffmann lives, so that he can visit her twice a day to operate on the throat.

They seemed surprised [illegible] one though not apparently [illegible] so; for I had [illegible] the way by [illegible] letters. They had [illegible] to [illegible] [illegible]

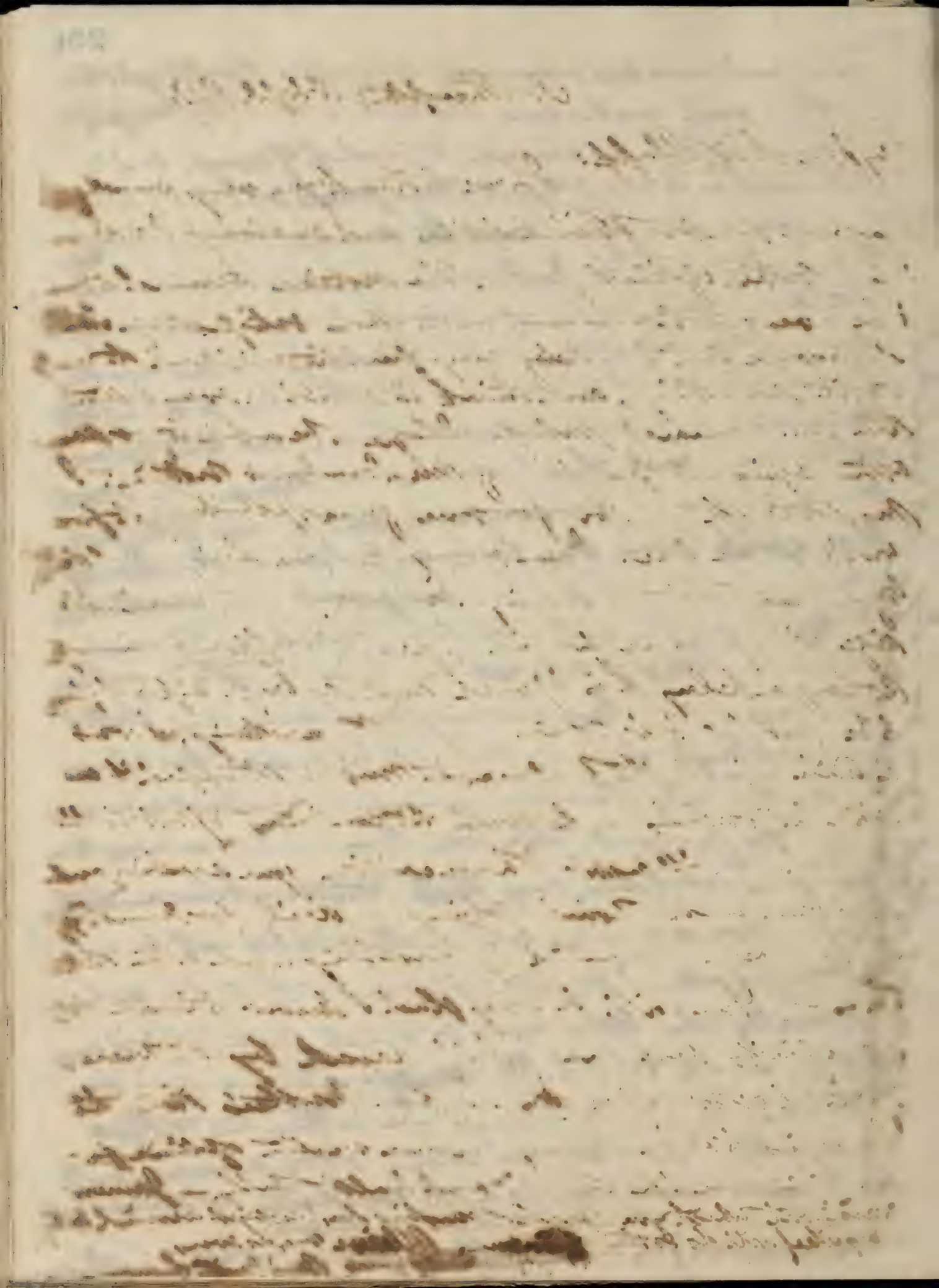
[illegible]

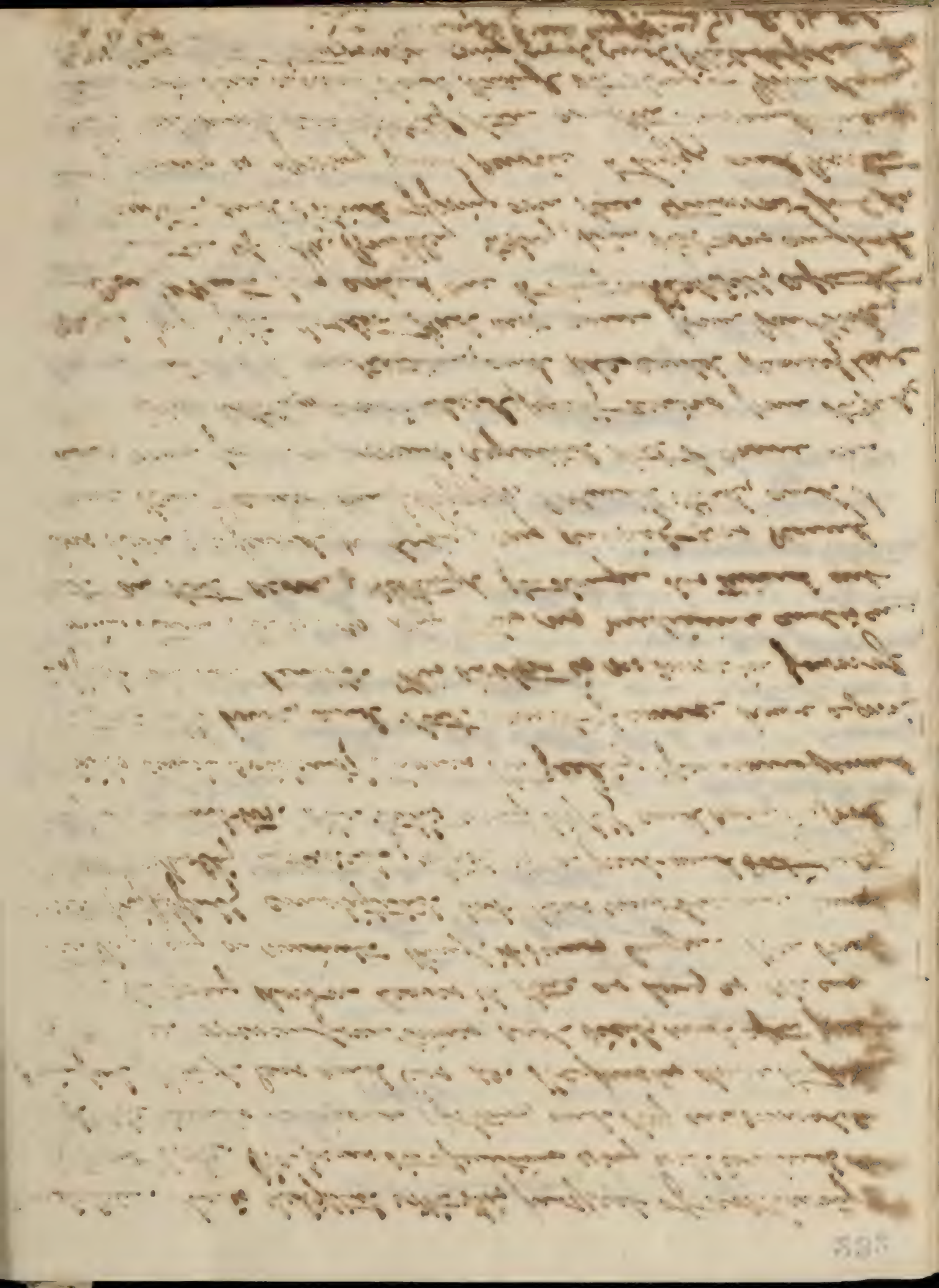
Northampton, Mass., 16 Sept 1871.

Mrs. Susan B. Lyman.

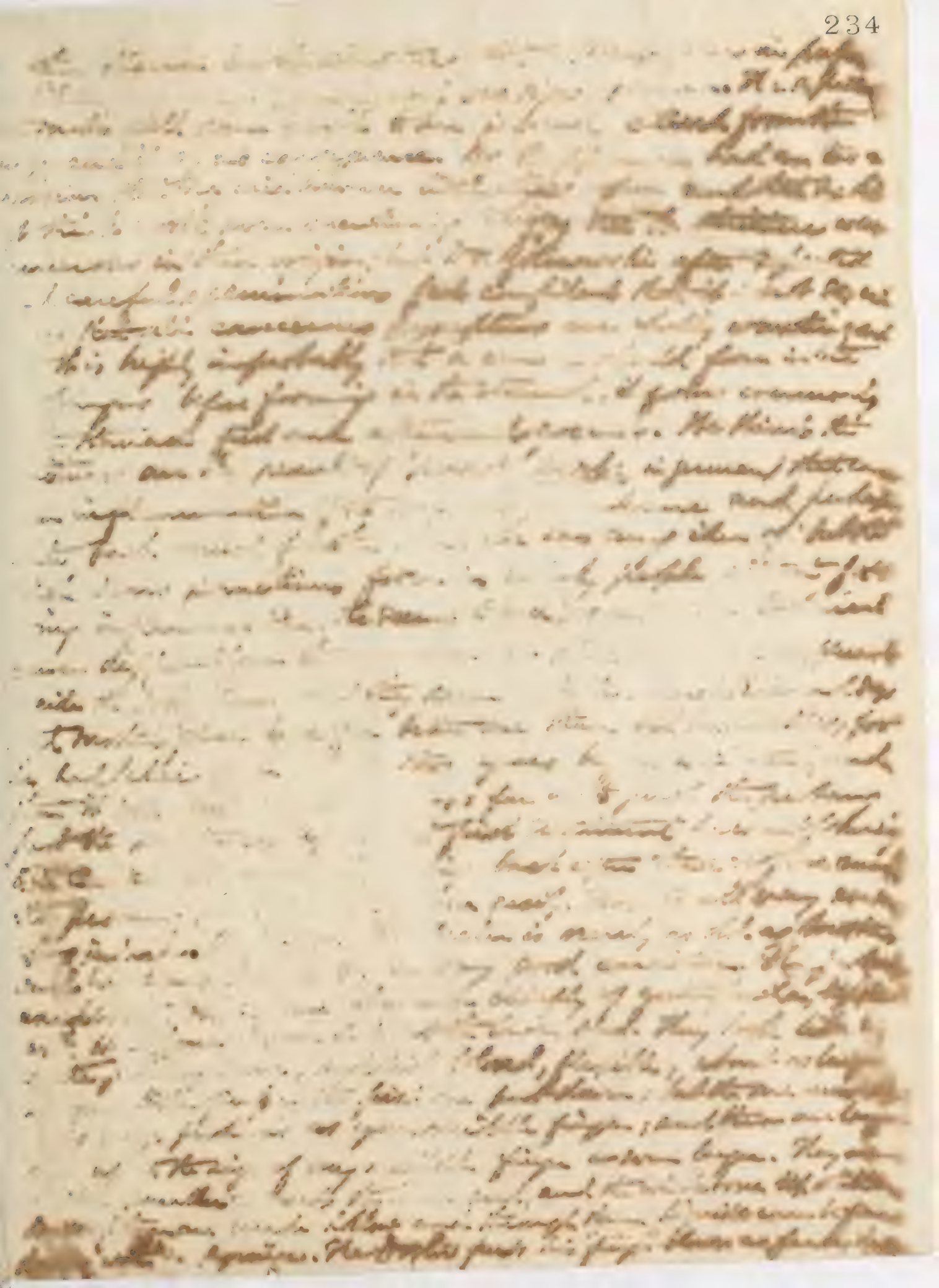
My dear friend:

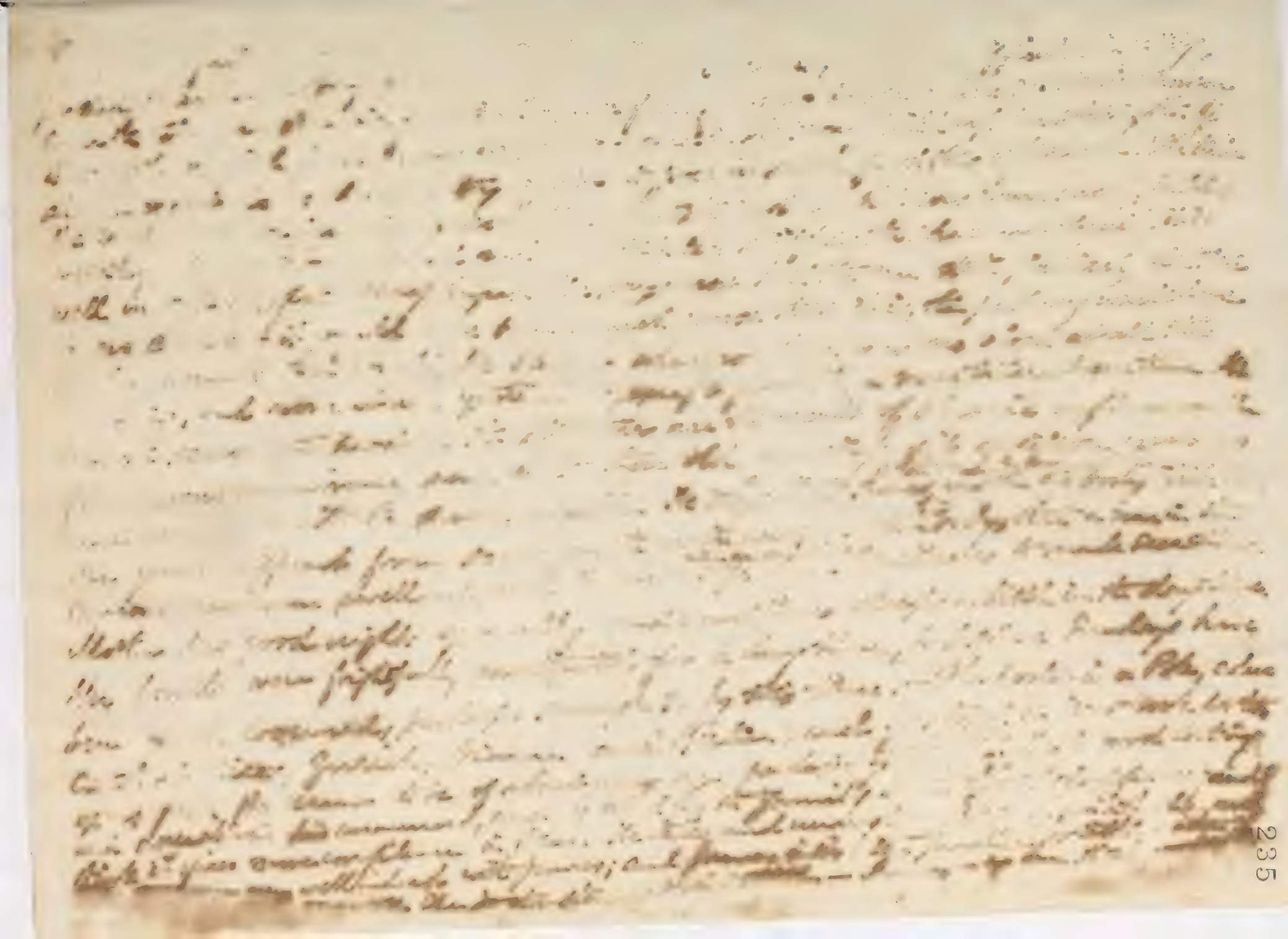
Many thanks for your kind [illegible]





Northampton, 19 Sept. 1871





Chicago, Ill., 19 Sept. 1871.

Dear Mary:

22 Feb 1869

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] ma vie.

[illegible] vie.

[illegible] venues, aux [illegible].

[illegible] — [illegible]

[illegible], but [illegible]

Si je [illegible] maître en oiseau,

Je [illegible] si fort que je ferais tous mes efforts,

Pour aller rejoindre mon amant à son bord.

Si je [illegible] maître en poisson,

Je nagerais si fort que je ferais tous mes efforts,

Pour aller rejoindre mon amant à son bord

Si je savais que mon amant fût mort,

Je quitterais le linge, je prendrais le noir,

Pour porter le deuil de mon amant.

Hoping that these may also be interesting to you [illegible]

Very affectionately yours,

Benj. Smith Lyman

[illegible]

Northampton, Mass., 27 Sept. 18[illegible]

Mr. [illegible]

Whit[illegible]

Dear Sir

Please [illegible] as soon as you [illegible] a pair of [illegible] the [illegible] you [illegible] for each [illegible] [illegible] [illegible] [illegible] and should be glad [illegible] them early [illegible] as possible.

Very truly yours,

Benj. Smith Lyman

Northampton, Massachusetts, 29 Sept 18[illegible].

[illegible]

135 South Fifth Street, Philadelphia;
11 Oct. 187[illegible].

Dear Lizzie:

Like James I have an adventure to [illegible] that happened on my way from Northampton. [illegible] more remarkable than his and happened [illegible] journey. [illegible] things in their regular order; [illegible] all the way to the station at Northampton and found on arriving there that there was ten minutes to spare. So much [illegible] and my own watch is fast. At Springfield I found I had nearly an hour to wait, so I went up to the Republican office to ask for Sanborn after putting my hand bag in the car which I was to take, so as to [illegible] the trouble of carrying it in public. Sanborn was not at the office, so I [illegible] for him and returned, and went [illegible] to my car to take up the bag [illegible]. As I raised one foot to step into the car a young woman with an engaging smile asked [illegible] something, perhaps [illegible] [illegible] looking for the [illegible] train [illegible] road. I dropped my foot again to the ground to [illegible] not forgetting to [illegible] in the apparent train [illegible] as far as Worcester [illegible] I understood that the train [illegible] half an hour at Springfield; had got out of the train and [illegible] a few minutes ago, and wished to [illegible] it had really left for Albany. It proved an [illegible] [illegible] that the train which had [illegible] [illegible] an accommodation train for Albany [illegible] and this train was [illegible] on the ground. She had left [illegible] in the car in charge of a lady passenger [illegible] who was going to [illegible]; but what was still more [illegible] the [illegible] was the missing [illegible] [illegible] at Albany and the possibility of [illegible] all right. The [illegible] trains are so frequent that she would probably have [illegible] a few hours for another. So we discussed the matter at some length and the proper [illegible] forming the [illegible]

135 South 4th Street, Philadelphia, 10th Apr